



Injuries, Illnesses & Fatalities in the Wholesale & Retail Trade Sector

A Chartbook

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Foreword

The National Institute for Occupational Safety and Health (NIOSH) is the federal agency responsible for occupational safety and health research. To meet the complex challenges of the 21st century, including changing workforce dynamics, new demands, and emerging occupational safety and health issues, NIOSH has organized its occupationally focused research into eight industry sectors. Investigators in each sector are responsible for identifying partners and stakeholders to ensure relevance, quality, and impact. To that end, each sector has developed a portfolio of research that encompasses the public health research continuum from problem identification to intervention and evaluation, with the goal of preventing workplace injuries and illnesses.

This NIOSH product was prepared as a surveillance resource to assist the public in understanding the occupational safety and health characteristics of the Wholesale and Retail Trade (WRT) sector. The WRT Chartbook focuses on data for the year 2005. Using 2005 data as a baseline enables NIOSH to evaluate the impact of the industry-specific focus of phase two of the National Occupational Research Agenda (NORA), which was initiated in 2006 (www.cdc.gov/niosh/nora). The information was formatted as a chartbook, consisting of more than 200 combined charts, figures, and tables, along with concise descriptive narratives and reference sources. The contents present information on the magnitude, distribution, and trends of the WRT sector, with reference to the nation's overall rates of occupational injuries, illnesses, and fatalities.

This chart-based document was prepared from publically available datasets to serve as a comprehensive reference tool, enabling identifications of those WRT subsectors that have higher than average rates and numbers of fatalities, injuries, and illnesses. This information is useful both for determining where interventions are needed and as a baseline for evaluating the impact of interventions.

Signature Block.

Dr. Howard etc

Preface

This report provides a summary of existing population, demographic, and fatal and nonfatal injury information describing a large population of understudied workplaces and workers in the wholesale and retail trade (WRT) sector. The intent is to identify high-risk subsectors, occupations, and tasks in the wholesale/retail trade sector in order to provide a basis for focused research and prevention efforts. Ultimately, the goal is to reduce occupational deaths, injuries, and associated costs experienced in wholesale and retail trade companies. The content is based upon current public domain data on occupational injuries, illnesses, fatalities, risks, and exposures affecting the WRT sector. Primary information sources include the Bureau of Labor Statistics (BLS), the National Center for Health Statistics (NCHS), and the U.S. Census Bureau, among other related sources. The information contained within this report should alert WRT employers and employees to hazards that may affect them, and provide direction for new research and prevention efforts in the sector. The data are presented as tables and charts.

The WRT sector is a product of NIOSH's efforts to organize the 2002, two-digit North American Industrial Classification System (NAICS) coding into logical groupings that can be readily communicated and strategically governed and evaluated. As a result, NIOSH combined the wholesale component (sector 42) with the retail component (sectors 44-45).

The combined WRT is the second largest of the eight NIOSH-defined sectors in terms of number of employees, about 21 million. The projected

10-year employee growth is 11% [BLS 2004]. The WRT sector consists of 1.6 million companies which represent 146 types of businesses. These businesses range from a one-person, one-location workplaces to a 1.7 million-employee chain store with 3,337 workplaces. With the exception of chain or franchised businesses, each worksite is unique. They differ in size, type of merchandise, number and bulk of products, and physical nature of the workplace (i.e., warehouse, office or store). However, the majority of jobs involve some aspects of materials handling (the storage, distribution, and sale of merchandise). Retail workers have the added demands and stresses of long workdays, prolonged standing, and frequent public contact.

This document is available in HTML and PDF formats on the Web at www.cdc.gov/niosh/docs/xxxxxxx/. Full-text bibliographic references are provided.

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Abstract

Injuries, Illnesses, and Fatalities in the Wholesale and Retail Trade Sector: A Chartbook (the WRT Chartbook or the Chartbook) is a descriptive epidemiologic reference on occupational morbidity and mortality within this large and important sector of U.S. industry. Through narrative text and statistical tables and charts, the Chartbook describes the magnitude, distribution, and trends of the sector's occupational injuries, illnesses, and fatalities for the year 2005.

The WRT Chartbook focuses on surveillance data for the year 2005; a representative mid-point for the decade. The year 2005 also serves as the baseline for the second decade of NORA which was launched in 2006 as the "Sector-based approach." A first step for the WRT Sector team was to compile and examine the most current (2005) surveillance data as it was supplied from the Department of Labor's Bureau of Labor Statistics throughout 2006. The resulting WRT Chartbook, consisting of 210 tables, charts, and figures, is intended to be a resource for agencies, organizations, employers, researchers, workers, and others interested in the risks and prevention of occupational injuries and illnesses. National data on both the numbers and rates of occupational injuries, illnesses, and fatalities were considered.

The Chartbook is organized into four distinct chapters:

Chapter 1 gives an overview of the demographic characteristics of the trade industry and its workers. Data are provided on WRT employment trends, occupations, subsectors, and economic factors and on workforce demographics, such as age, gender, and race/ethnicity.

Chapter 2 focuses on fatalities in the WRT sector. Tables and charts provide the context for comparing fatality rates, numbers, and trends across industry sectors and within the WRT sector. Information on events and exposures associated with fatalities are presented for both the wholesale and retail trade sectors. Geographic data show states with the highest number of worker fatalities. Chapter 2 also provides information on the fatalities by occupation, gender, age, and race/ethnicity.

Chapter 3 gives information on nonfatal injuries and illnesses among trade workers. This chapter provides the context for evaluating the impact of nonfatal injuries/illnesses and their severity as measured by cases with days away from work (DAW). The nature of the events and exposures that are associated with nonfatal injuries/illnesses are presented in detail for both the wholesale and retail sectors. The data consist of both the rates and the actual number of cases of injuries/illnesses for subsectors. The information presented on the types of injuries/illnesses allows one to focus on those injury/illness types that are most prevalent, such as sprains and strains, fractures, and cuts/lacerations. The sources of injury/illness are shown and include items such as containers, vehicles, the floor, worker motion, and parts. Figures identify the parts of the body that are affected. The data are broken down by gender, age, race/ethnicity, and location.

Chapter 4 addresses selected high-risk subsectors from among the 146 distinct types of businesses (71 wholesale businesses and 75 retail businesses) that make up WRT. When the occupational injury, illness, and fatality data are compiled for the overall sector, the resulting counts and rates, though useful for making general

comparisons between major industry sectors (2-digit NAICS), mask the reality that certain subsectors experience much higher counts and rates than others. The purpose of Chapter 4 is to examine data specific to the WRT subsectors in order to (1) identify subsectors that experience higher rates and counts of occupational injuries, illnesses, and fatalities and (2) examine characteristics of the workforce and the injury, illness, and fatality outcomes for higher-risk subsectors. Such examination may identify factors that appear to contribute to risk and cause in the high-risk subsectors, which, in turn, may suggest prevention opportunities.

A reference list is provided at the end of each chapter that provides citations of data sources linked to each table and figure included in the Chartbook.

The WRT Chartbook also contains an appendix and a bibliography of additional references. The appendix has a complete breakdown of the 146 types of wholesale and retail subsectors by NAICS code. This listing is a useful view of the variety of industries or businesses included in the WRT sector from the two-digit level through the six-digit level of NAICS.

The WRT Chartbook builds upon the landmark Worker Health Chartbook 2000 (updated in 2004) [NIOSH 2004], which is an epidemiologic reference on occupational morbidity and mortality across all industries in the United States. The Worker Health Chartbook 2004 includes more than 400 figures and tables describing the magnitude, distribution, and trends of the Nation's occupational injuries, illnesses, and fatalities. The Worker Health Chartbook 2004 is accessible on the NIOSH Website at: www.cdc.gov/niosh/docs/2004-146/.

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Abbreviations

- BLS..... Bureau of Labor Statistics
- CDC..... Centers for Disease Control and Prevention
- CFOI..... Census of Fatal Occupational Injuries
- CPS Current Population Survey
- DAW days away from work
- NAICS..... North American Industrial Classification System
- NIOSH National Institute for Occupational Safety and Health
- NORA National Occupational Research Agenda
- OSHA Occupational Safety and Health Administration
- SIC..... Standard Industrial Classification

Glossary

Centers for Disease Control and Prevention: The Centers for Disease Control and Prevention (CDC) is headquartered in Atlanta, Georgia and is an agency of the U.S. Department of Health and Human Services. CDC is recognized as the lead federal agency for protecting the safety and health of people at home and abroad. CDC provides credible information to enhance health decisions and promote health through strong partnerships with other public and nongovernment organizations. CDC serves as the national focus for developing and applying disease prevention and control, occupational and environmental health, and health promotion and education activities designed to improve the health of the people of the United States.

Civilian labor force: The civilian labor force comprises all civilians classified as employed and unemployed.

Employed persons: Employed persons are all persons who fit into one of the following categories during the reference week of the U.S. Census Bureau's Current Population Survey: (1) persons who did any work at all as paid employees, worked in their own business or profession or on their own farm, or worked 15 or more hours as unpaid workers in a family-operated enterprise and (2) persons who did not work but had jobs or businesses from which they were temporarily absent because of illness, bad weather, vacation, child-care problems, labor disputes, maternity or paternity leave, or other family or personal obligations—whether or not they were paid by their employers for the time off and whether or not they were seeking other jobs.

Fatal occupational injury rate: Fatal occupational injury rates are determined by combining the number of fatal occupational injuries identified by the Census of Fatal Occupational Injuries (CFOI), which is organized by the Bureau of Labor Statistics (BLS), with the average annual number of employed workers from the Current Population Survey (CPS), conducted for BLS by the Census Bureau. These rates depict the risk that certain workers (such as those in a given occupation or industry) have of incurring a fatal injury. The formula for calculating a fatal occupational injury rate is

$$\text{Fatal injury} = (N/W) \times 100,000$$

where

N = the number of fatally injured workers ages 16 and older.

W = the number of employed workers ages 16 and older.

For example, in computing the fatal occupational injury rate for 1994,

$$\begin{aligned} N &= 6,588 - 25 \text{ workers under age 16} \\ &= 6,563 \text{ (from 1994 CFOI)} \end{aligned}$$

and

$$W = 124,469,000$$

(from Current Population Survey 1994 annual average plus resident military figures derived from Census Bureau data). Thus

$$\begin{aligned} \text{Fatality rate} &= (6,563/124,469,000) \times 100,000 \\ &= 5 \text{ deaths per } 100,000 \text{ workers} \end{aligned}$$

Because neither hours nor employment figures are collected in the CFOI, fatality rates are calculated using annual average employment estimates from the Current Population Survey. Employment-based fatality rates measure the incidence of a fatal injury for all workers in the group regardless of exposure time. Such measures do not reflect the movement of persons into and out of the labor force, the length of their workweek or work year, or the effect of multiple jobholders.

Hispanic or Latino workers: Hispanic or Latino workers are those who trace their origins to a Spanish-speaking country or culture. Origins may include the heritage, nationality group, ancestry, or country of birth of the person or person's parents or ancestors. People who identify their origin as Hispanic or Latino may be of any race.

Incidence rate for nonfatal injury or illness:

Incidence rates for nonfatal injury or illness are calculated using the total obtained through the weighting and benchmarking procedures. The adjusted estimates for a particular characteristic (for example, for injury and illness cases involving days away from work) are aggregated to the appropriate level of industry detail. The total is multiplied by 200,000 (the base of hours worked by 100 full-time workers for 1 year). The product is then divided by the weighted and benchmarked estimate of hours worked as reported in the survey for a particular industry segment.

The formula for calculating the incidence rate at the lowest level of industry detail is

Incidence rate =	(Sum of characteristic reported) • 200,000
	(Sum of the number of hours worked)

Incidence rates for higher levels of industry detail are produced using aggregated, weighted, and benchmarked totals. Rates may be computed by industry, employment size, geographic area, extent or outcome of case, and case characteristic category. Rates for illnesses and rates for case characteristic categories are published per 10,000 full-time employees using 20 million hours instead of 200,000 hours as in the above formula. Rates per 10,000 workers can be converted to rates per 100 workers by moving the decimal point two places to the left and rounding the resulting rate to the nearest 0.1.

Industry: An industry consists of a group of establishments primarily engaged in producing or handling the same product or group of products or in rendering the same service or services. For more than 60 years, the Standard Industrial Classification (SIC) system has served as the structure for collecting, aggregating, presenting, and analyzing data on the U.S. economy. Industry definitions used in BLS programs come from the 1987 *Standard Industrial Classification Manual* by the Office of Management and Budget. Because the SIC is used by many other federal government statistical programs, it is possible for users to assemble a comprehensive statistical picture of an industry.

Lost-workday cases: Lost-workday cases are cases of nonfatal injury or illness that involve days away from work or days of restricted work activity or both.

Lost-workday cases involving days away from work: Lost-workday cases are cases that result in days away from work or a combination of days away from work and days of restricted work activity.

Lost-workday cases involving restricted work activity: Lost-workday cases involving restricted work activity are those cases that result in restricted work activity only.

Occupation: Occupation is a set of activities or tasks that workers are paid to perform. Workers who perform essentially the same tasks are in the same occupation whether or not they are in the same industry. Some occupations are concentrated in a few industries and others may be found in the majority of industries.

Current, recent, or usual job activity information is collected by many agencies to help characterize an occupation. Questions are used to obtain information about the kind of work and the most important activities or duties. This information, in conjunction with industry or employer and class of worker (e.g., private or public sector, nonprofit, self-employed), is used to classify jobs by occupational class. BLS data on the occupation of the injured or ill worker was coded from job titles supplied by the employer, supplemented at times by employer descriptions of how the incident occurred.

In 1990 the Census Bureau developed the Occupational Classification System to classify thousands of job titles supplied by employers into several hundred individual occupations; such as registered nurse, licensed practical nurse, or nursing aide or orderly. Each occupation is tied to one of six major occupational groups: (1) managerial and professional specialty; (2) technical, sales, and administrative support; (3) service occupations; (4) farming, forestry, and fishing; (5) precision production, craft, and repair; and (6) operators, fabricators, and laborers.

Occupational injury: An occupational injury is any injury that results from a work-related event or from a single instantaneous exposure in the work environment.

Occupational illness: An occupational illness is any abnormal condition or disorder (other than one resulting from an occupational injury) caused by exposure to factors associated with employment. Occupational illness includes acute and chronic illnesses and diseases that may be caused by inhalation, absorption, ingestion, or direct contact.

Race: Race refers to a human population distinguished as a group by certain physical characteristics. However, the concept of race involves self-identification. Racial categories are sociopolitical constructs and should not be interpreted as being scientific or anthropological. Racial categories include both racial and national-origin groups. The racial classifications used by most federal agencies since 1997 follow the standards set forth in the October 30, 1997, Federal Register Notice entitled *Revisions to the Standard Classification of Federal Data on Race and Ethnicity*. The Office of Management and Budget (OMB) requires five minimum categories for race: white, black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or other Pacific Islander. OMB also states that respondents should be offered the option to select one or more races.

Rates: See incidence rates or fatal occupational injury rates.

Severity: Severity of an injury or illness is estimated by using information provided by employers about the number of days away from work to recuperate from each disabling condition.

If, as a result of injury or illness, the worker did not return to work by the end of the survey year, the employer reports an approximate return date that, in conjunction with the date of injury or illness, yields an estimated number of days away from work for that case. Two basic measures of severity are used with the characteristics of DAW cases: (1) median days away from work (the point at which half of the DAW cases have a longer duration and half have a shorter duration), and (2) the distribution of DAW cases involving various lengths of absences from work, ranging from 1 or 2 days to 31 days or longer.

Surveillance: Surveillance is the systematic, ongoing collection or acquisition of information about occupational diseases, injuries, and hazards. Surveillance includes the analysis and interpretation of surveillance data, the dissemination of data or information derived from surveillance to appropriate audiences for prevention and control, and the development of surveillance methodology.

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The Wholesale and Retail Trade Chartbook includes a substantial amount of information based on data and other contributions from the Office of Safety, Health, and Working Conditions, Bureau of Labor Statistics. The nature and extent of the content of the Chartbook provided a significant challenge to our technical reviewers. We extend our thanks for their time, constructive comments, and suggestions.

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Background

The wholesale trade sector comprises establishments engaged in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The wholesaling process is an intermediate step in the distribution of merchandise. Wholesalers are organized to sell or arrange the purchase or sale of (1) goods for resale (that is, goods sold to other wholesalers or retailers), (2) capital or durable nonconsumer goods, and (3) raw and intermediate materials and supplies used in production. Wholesalers sell merchandise to other businesses and normally operate from a warehouse or office.

The retail trade sector comprises establishments engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The retailing process is the final step in the distribution of merchandise; retailers are therefore organized to sell merchandise in small quantities to the general public. This sector comprises two main types of retailers: store and nonstore retailers.

A number of researchers have found evidence that BLS data are, in general, underreported [Azaroff et al. 2002; Leigh 2004]. One reason offered is a function of the BLS use of Occupational Safety and Health Administration (OSHA) logs as the collection mechanism. Compared with injuries, illnesses are more likely to be underreported as the result of a less direct association with an event or exposure and latency periods that may extend beyond the OSHA 5-year reporting requirement. The NAICS codes all economic activities using an hierarchical coding system with industry sectors

and subsectors coded with 2, 3, 4, 5, and 6 digits. NAICS, which was used to designate the NORA sectors, has been used by BLS since the collection of their 2003 data.

Wholesale and retail trades make up a large part of the nation's employment and business establishments. In the overall U.S. economy, wholesale trade represents about 4.4% of all employment and 7.1% of all establishments whereas retail trade is about 11.6% of all employment and 12.4% of all establishments. When combined, the WRT sector accounts for 16% of all employment and 19.5% of all establishments.

Current employment statistics estimate that annual average employment in wholesale trade during 1995–2005 ranged from 5.4 million in 1995 to 5.9 million in 2000. During 2005, wholesale trade employment averaged 5.7 million. In retail trade during the same period, employment ranged from 13.9 million in 1995 to 15.3 million in 2005. Over the last 10 years, the average hourly earnings of nonsupervisory workers in the wholesale industry averaged 12% more per hour than the average earnings in all private industry, whereas the average retail worker made 27% less than the average production and nonsupervisory workers. The impact lower earnings has on safety and health in the workplace has not been investigated; however, lower-than-average earnings have been associated with a poorer quality of healthcare. What implications poorer overall health has on a person's safety and health at work is also a topic for further research.

In general, workers in the WRT combined sector are at a relatively low risk of occupational injury

and death as compared with workers in the mining and agriculture industries. Yet, because workers in the WRT sector outnumber those workers in small industry sectors, such as mining and agriculture sectors, the actual number of injuries/illnesses and deaths is substantial. However, at the 4- and 5-digit NAICS WRT subsector level, there is a broad range of work activities and physical hazards that may pose a considerable risk for thousands of WRT workers. The purpose of the WRT Chartbook is to provide sufficient data in the forms of charts and figures to allow users to assess the occupational fatality, injury and illness burden in the WRT and to identify subsectors where intervention efforts may be targeted.

Summary of Findings

Fatal injuries

- The WRT sector had 609 worker deaths from trauma in 2005, fourth among major industry sectors following construction (1,192); transportation, warehousing (885); and agriculture, forestry, fishing and hunting (669). (See Table 2.1)
- These 609 deaths represented nearly 12% of all worker deaths in the U.S. private sector; 400 of the 609 deaths occurred in retail trade, and 209 occurred in wholesale trade.
- Of the 400 fatalities among retail workers in 2005, 50% resulted from assaults and violent acts; whereas, in wholesale trade, the leading cause or event associated with fatalities in the same year involved transportation incidents (51%).
- Among 4-digit wholesale trade subsectors, miscellaneous durable goods (NAICS 4239) had the highest number (29) of fatal work injuries, largely a result of 20 deaths in the recyclable material (NAICS 42393) subsector.
- Among 4-digit retail trade subsectors, grocery stores (NAICS 4451) experienced 84 traumatic worker deaths (46 deaths in convenience stores and 38 deaths in supermarkets and other nonconvenience grocery stores), followed by gasoline stations (NAICS 4471) with 58 deaths, automobile dealers (NAICS 4411) with 43, and building material and supplies dealers (NAICS 4441) with 39.

- If fatalities from assaults and violent acts are combined for convenience stores (NAICS 44512; 36 deaths) and gasoline stations with convenience stores (NAICS 44711; 36 deaths), the total (72 deaths) exceeds the 58 deaths due to violence that occurred among state and local police (police protection, NAICS 92212), the 35 each that occurred in taxi and limousine service (NAICS 48531) and full-service restaurants (NAICS 72211), the 30 that occurred in limited service restaurants (NAICS 72221), and the 29 that occurred in drinking places (alcoholic beverages) (NAICS 7224).
- Sales and related occupations accounted for nearly half of all WRT fatal injuries, followed by transportation and material moving occupations.
- Women accounted for a much higher proportion of fatal work injuries in retail trade (14.0%) compared with wholesale trade (3.8%) and all private sector industries combined (6.6%).
- The largest number of fatal injuries in WRT occurred in California, followed by Florida and Texas.

Nonfatal injuries

- In 2005 WRT workers experienced more nonfatal injuries/illnesses (849,700) than any major industry except manufacturing (895,900), and more of the WRT injuries/illnesses were severe enough to result in DAW (256,100) than any other industry, including manufacturing (209,100).
- The leading events or exposures that contributed to nonfatal injuries/illnesses with DAW in WRT were contact with object/equipment (28.6%

of all DAW injuries) and overexertion (26.9%). Falls to same level contributed 13.9% of all DAW injuries/illnesses in WRT.

- Sprains/strains was by far the leading nature of injury/illness in WRT, accounting for well over 111,000 injuries in 2005.
- Containers were the most prevalent source of injury/illness in WRT, followed by floors, walkways, or ground surfaces; worker motion or position; vehicles; and parts and materials.
- Of the 14 U.S. industry sectors with at least 100,000 nonfatal occupational injuries and illnesses in 2005, 4 are WRT subsectors—general merchandise stores (NAICS 452), merchant wholesalers, durable goods (NAICS 423), supermarkets and other grocery stores (NAICS 44511), and merchant wholesalers, nondurable goods (NAICS 424)
- The wholesale trade subsector beer, wine, and distilled alcoholic beverage merchant wholesalers (NAICS 4248) is among the industry subsectors that BLS lists as having the highest injury/illness case rates with days away from work (6.6 cases per 10,000 workers).
- Beer, wine, and distilled alcoholic beverage merchant wholesalers (NAICS 4248) had the highest total injury/illness case rate (9.6) of all wholesale subsectors, followed by grocery and related product (NAICS 4244) (7.7), metal and mineral (except petroleum) (NAICS 4235) (7.5), lumber and other construction materials (NAICS 4233) (6.8), farm product raw material (NAICS 4245) (6.1), and motor vehicle and motor vehicle parts and supplies (NAICS 4231) (6.0).

- Among 5-digit retail trade subsectors, the highest total case injury/illness rates were experienced in home centers (NAICS 44411) (9.2), warehouse clubs and superstores (44419) (7.3), other building material dealers (44419) (7.0), tire dealers (NAICS 44132) (6.6), supermarkets and other grocery (except convenience) stores (NAICS 44511) (6.4), and hobby, toy, and game stores (45112) (6.4).
- In summary, working in a warehouse or in a retail outlet is generally perceived as relatively safe work, and the BLS numbers for WRT overall support that perception. **However, despite the low rates, the absolute number of injuries/illnesses resulting in days away from work (DAW) experienced by workers in the sector exceed the number experienced in any other major sector, including those traditionally recognized as high-risk.** The number of fatal injuries in WRT is also relatively high among major industry sectors. Although rates of fatal injury and nonfatal injury/illness in WRT are only slightly higher than the national average, nearly 1 million wholesale and retail workers suffer injury or illness at work each year. A main reason for this dubious distinction is the large number of workers employed in the WRT sector: more than 21 million in 2005. Also, a large number of young workers are employed in WRT and, overall, young workers ages 16–19 years of age suffer injury or illness at a rate twice that of all workers combined.

Chapter 1

Characteristics of Wholesale & Retail Trade Workers

Employment in Wholesale and Retail Trade

(Tables 1.1 and 1.2)

According to BLS data, more than 110 million workers ages 16 years or older were employed in the U.S. private sector in 2005.

Over 21 million of these (19.0%) were employed in the WRT subsectors—15.3 million in retail trade, and 5.8 million in wholesale trade. BLS projects that by 2016, WRT will have more than 22 million employed workers. Retail employment is projected to increase by about 0.4% from 1996–2016, and wholesale employment is projected to increase about 0.7%.

Employment Trends in Wholesale and Retail Trade Subsectors (Figure 1.1)

Wholesale and retail trade subsectors exhibit different employment trends. The BLS Current Employment Statistics survey shows that although employment in both subsectors increased from January 2005 through November 2007, retail employment experienced sharper seasonal fluctuations than wholesale employment. The fluctuations are likely in part due to increased hiring to meet demands during consumer-oriented holidays. From December 2007 through November 2008, both subsectors showed steadily decreasing employment.

Employment for wholesale in January 2005 was at 5,702,600, increased steadily, and peaked at 6,075,000 in November 2007. Thereafter, wholesale employment declined to 5,890,300 in

Table 1.1. Employment (ages 16 years and older) in wholesale and retail trade subsectors, wholesale and retail trade overall, and the U.S. private sector: 2003–2005.

Sector	2003	2004	2005
Wholesale trade	5,589,032	5,642,537	5,752,802
Retail trade	14,930,765	15,060,686	15,256,340
Wholesale/retail trade (WRT) combined	20,519,797	20,703,223	21,009,142
U.S. private industry	107,065,553	108,490,016	110,611,016

Table 1.2. Employment in wholesale and retail trade subsectors, and wholesale and retail trade overall, 2006 and 2016 (projection).

Industry sector	2006	2016	% Increase
Wholesale trade	5,898,000	6,326,000	0.7%
Retail trade	15,319,000	16,006,000	0.4%
WRT overall	21,217,000	22,332,000	0.5%

Figure 1.1. Employment in wholesale and retail trade subsectors, January 2005 through November 2008 (thousands).

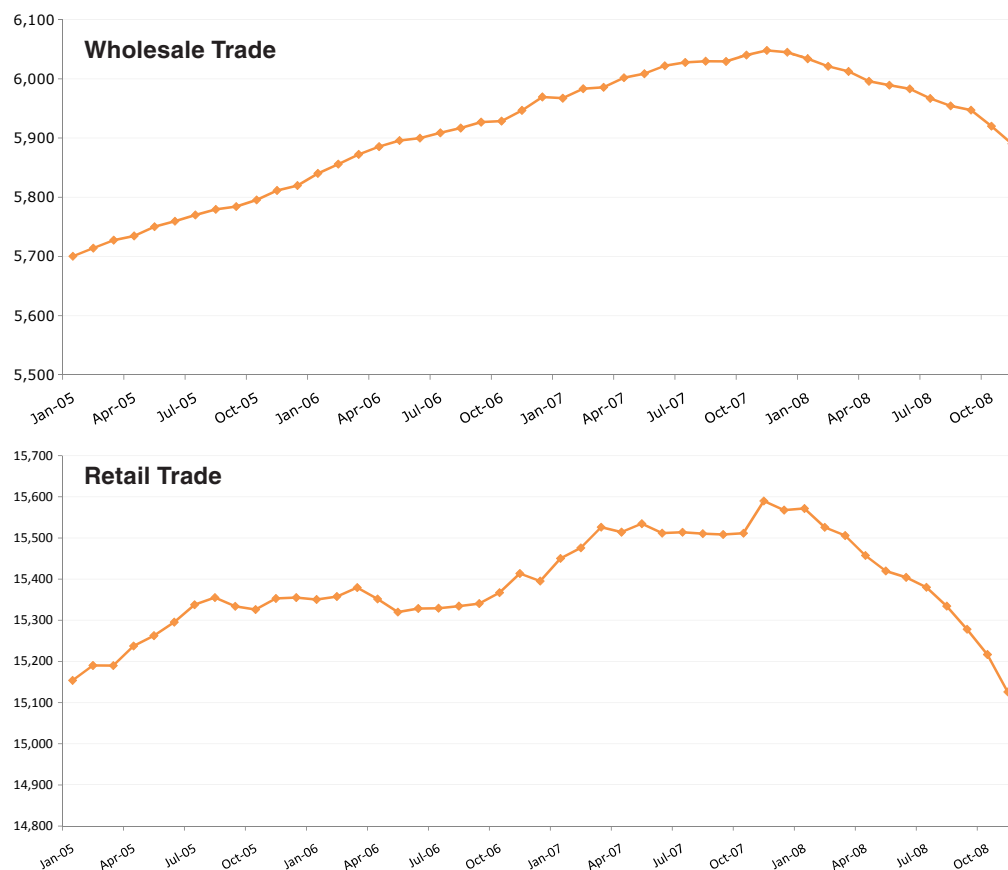


Figure 1.2. Fastest growing major occupational groups in the wholesale trade sector, 2006–2016 (percent increase rounded up).

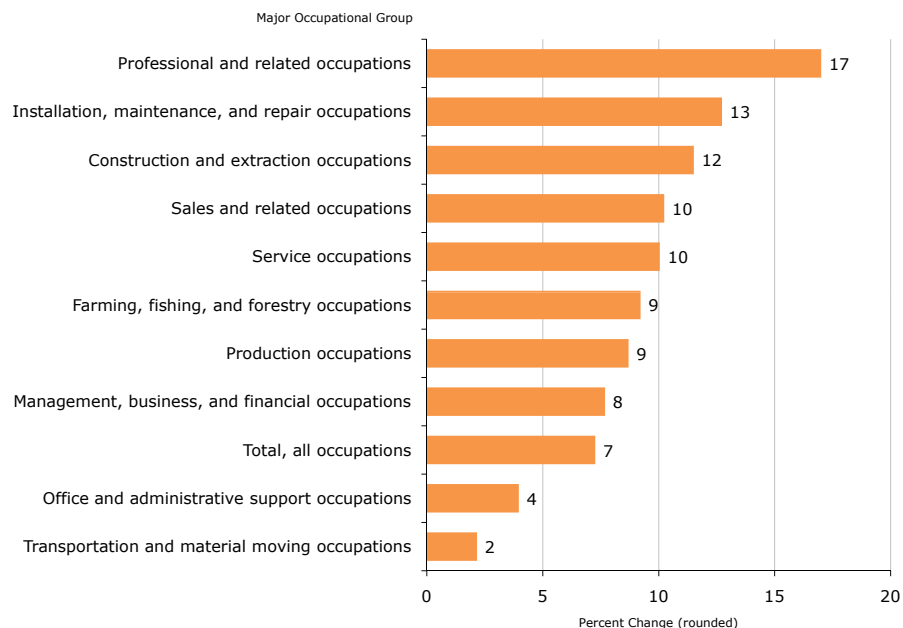
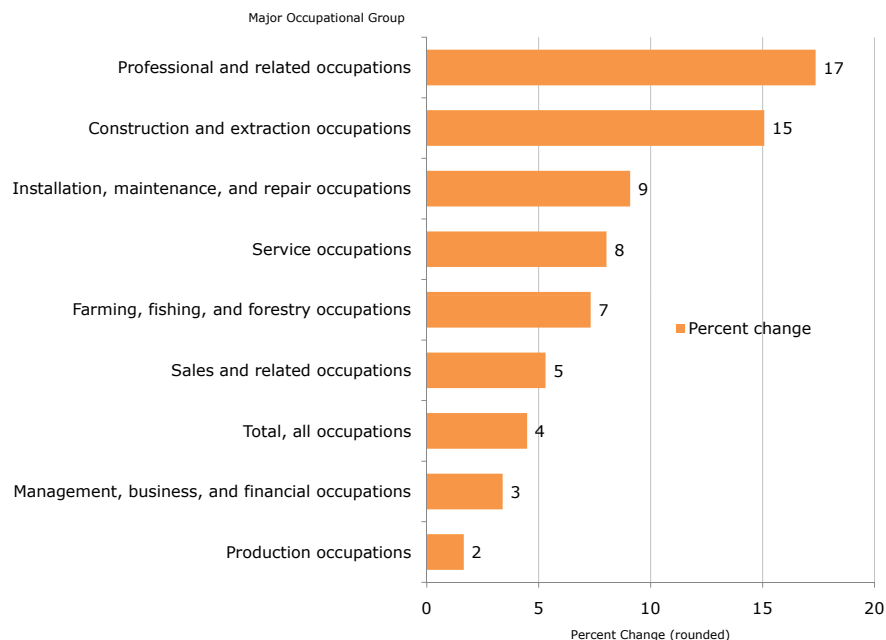


Figure 1.3. Fastest growing major occupational groups in the retail trade sector, 2006–2016 (percent increase rounded up).



November 2008. Over the entire period, employment in wholesale trade grew by 3.3%.

During the same period, retail employment increased from 15,153,900 in January 2005, peaked at 15,590,000 in November 2007, and also began to decline, dropping to 15,126,000 by November 2008, a net decrease of 0.2%.

Fastest Growing Major Occupational Groups in Wholesale and Retail Trade *(Figures 1.2 and 1.3)*

The BLS National Employment Matrix predicts that the fastest growing major occupational group in wholesale trade by 2016 will be professional and related occupations (17% growth), with network systems and data communications analysts (55%), computer software engineers, applications (38%), and industrial engineers (37%) showing the greatest growth rate among specific occupations in that category. Other major occupational groups with high projected rates of growth include installation, maintenance, and repair occupations (13%), construction and extraction occupations (12%), sales and related occupations (10%), and service occupations (10%). Similarly, the fastest growing major occupational group in retail trade by 2016 will also be professional and related occupations (17% growth), with network systems and data communications analysts (36%) showing the greatest growth rate among specific occupations in that category.

Major Occupational Groups with Largest Number of Jobs Added in Wholesale and Retail Trade

(Figures 1.4 and 1.5)

According to the BLS, the major occupational group in WRT with the largest projected increase in workers by 2016 is sales and related occupations, which is expected to gain nearly 600,000 workers by 2016 (439,742 net gain in retail; and 158,723 net gain in wholesale). In wholesale, the largest gains will be among sales representatives, wholesale and manufacturing (133,796), while the retail sector will add 500,894 retail salespersons. Other major occupational groups in wholesale expected to gain a substantial number of workers include: office and administrative support occupations (55,494), particularly customer service representatives (41,954); installation, maintenance, and repair occupations (49,648); and management, business, and financial occupations (42,499). Other major occupational groups in retail expected to add a substantial number of workers include: professional and related occupations (net gain of 104,250), with a large increase among healthcare practitioners and technical occupations (108,493), particularly pharmacy technicians and pharmacists (70,135 and 35,742, respectively); installation, maintenance, and repair occupations (73,178), with larger numbers of automotive technicians and repairers and tire repairers and changers; and service occupations (65,833), with more food preparation and serving workers.

Figure 1.4. Major occupational groups in the wholesale trade sector in which the largest number of jobs will be added, 2006–2016.

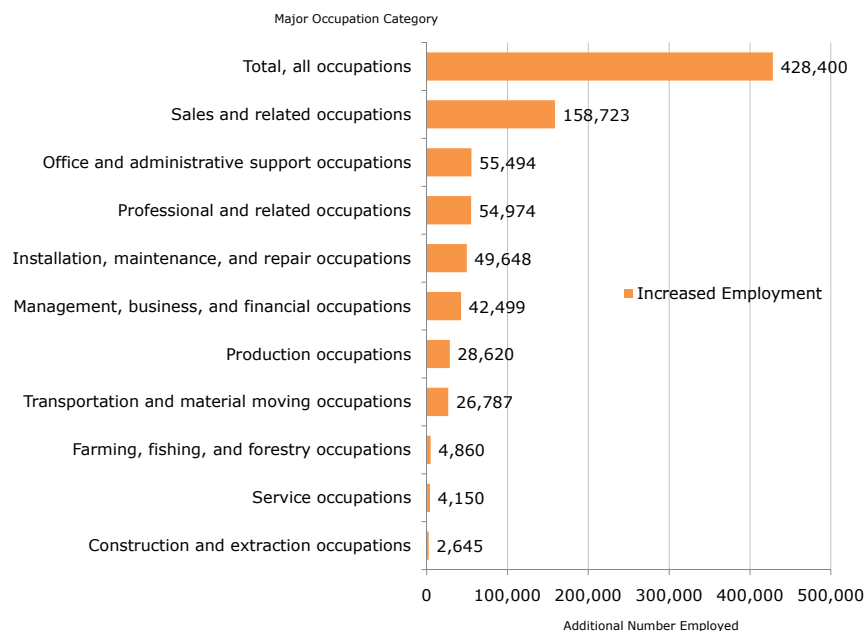


Figure 1.5. Major occupational groups in the retail trade sector in which the largest number of jobs will be added, 2006–2016.

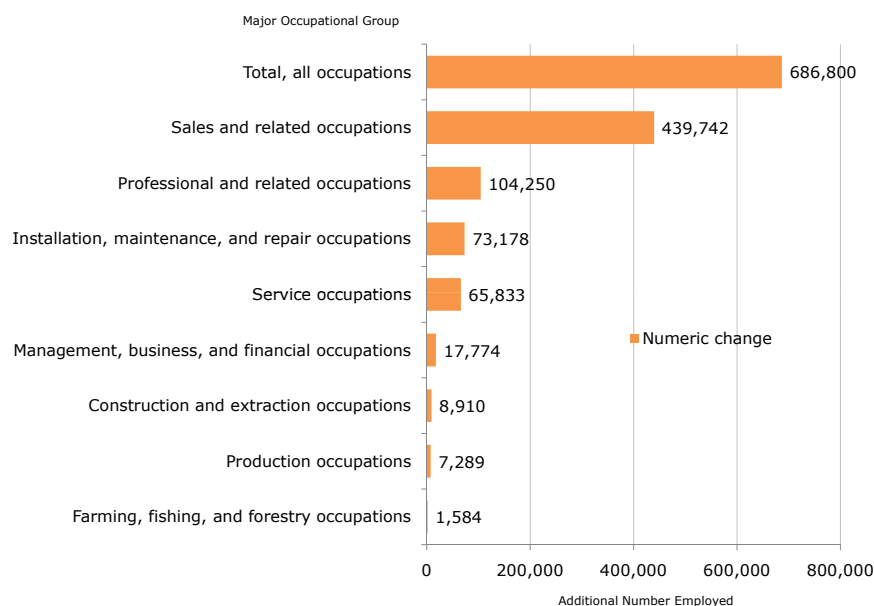


Table 1.3. Wholesale and retail trade subsectors with highest employment, by gender and race/ethnicity, 2005.

Subsector	Number (thousands)	Distribution (%)					
		Men	Women	White	Black or African American	Asian	Hispanic or Latino
All	21,405	55.6	44.4	84.4	9.1	4.3	12.7
Grocery Stores	2,670	49.2	50.8	81.5	10.3	5.4	14.2
Department stores and discount stores	2,434	36.5	63.5	79.5	14.7	3.1	12.4
Automobile Dealers	1,337	80.2	19.8	89.1	6.8	2	11.5
Building material and supplies stores	1,088	71.5	28.5	89	7.4	1.6	11.6
Clothing and accessories, except shoe, stores	890	26.3	73.7	78.4	14	5.6	14.4
Groceries and related products, merchant wholesalers	887	73.5	26.5	84.8	9.8	3.2	21.1
Pharmacies and drug stores	834	36.9	63.2	81.8	10.7	5.5	10.6
Furniture and home furnishings stores	715	57.6	42.5	85.2	9.9	2.9	13.7
Radio, TV, and computer stores	652	69.9	30.1	78.4	11	4.1	8.6
Auto parts, accessories, and tire stores	526	85	15	89.7	6.8	1.9	14.4

Largest Wholesale and Retail Trade Subsectors *(Table 1.3)*

The Current Population Survey (CPS) estimated that subsectors in WRT that had the highest employment in 2005 were grocery stores, department and discount stores, automobile dealers, building material and supplies stores, and clothing and accessories (except shoe) stores. Grocery stores employed roughly an equal number of male and female workers, whereas males made up nearly three quarters of workers at grocery wholesalers—the one wholesale subsector that ranked among the 10 largest WRT employers. Department and discount stores employed not quite twice as many females as males. Automobile dealers and building materials and supplies stores both have a disproportionate ratio of male to female workers—eight of ten workers in automobile dealers and seven of ten in building materials and supplies stores are male. Nearly three quarters of employees at clothing and accessories (except shoe) stores in 2005 were female. See Chapter 4 for more detail on the occupational injury/illness and fatality experience in selected high-risk WRT subsectors.

Table 1.4. WRT subsectors (4-digit NAICS) with the largest projected employment growth by 2016, ranked by percent change.

WRT Subsector	NAICS	2006 Employment	2016 Employment	Numeric Change	% Change
Other motor vehicle dealers	4412	169,300	220,400	51,100	30.2
Building material and supplies dealers	4441	1,176,100	1,507,000	330,900	28.1
Other general merchandise stores	4529	1,362,000	1,734,700	372,700	27.4
Electronic shopping and mail-order houses	4541	243,200	295,200	52,000	21.4
Home furnishings stores	4422	288,800	335,500	46,700	16.2
Electrical and electronic goods merchant wholesalers	4236	344,300	395,900	51,600	15.0
Professional and commercial equipment and supplies merchant wholesalers	4234	653,800	750,100	96,300	14.7
Drugs and druggists' sundries merchant wholesalers	4242	210,700	241,500	30,800	14.6
Automobile dealers	4411	1,246,700	1,387,600	140,900	11.3
Wholesale electronic markets and agents and brokers	4251	781,000	868,000	87,000	11.1
Lumber and other construction materials merchant wholesalers	4233	264,800	294,000	29,200	11.0
Motor vehicle and motor vehicle parts and supplies merchant wholesalers	4231	349,200	384,500	35,300	10.1
Chemical and allied products merchant wholesalers	4246	132,500	145,700	13,200	10.0
Miscellaneous durable goods merchant wholesalers	4239	288,300	316,100	27,800	9.6
Hardware, and plumbing and heating equipment and supplies merchant wholesalers	4237	255,200	278,700	23,500	9.2
Clothing stores	4481	1,090,400	1,189,800	99,400	9.1
Health and personal care stores	4461	955,600	1,041,000	85,400	8.9
Used merchandise stores	4533	113,600	122,000	8,400	7.4
Beer, wine, and distilled alcoholic beverage merchant wholesalers	4248	151,700	161,100	9,400	6.2
Metal and mineral (except petroleum) merchant wholesalers	4235	128,000	135,700	7,700	6.0
Furniture and home furnishing merchant wholesalers	4232	117,200	123,100	5,900	5.0
Sporting goods, hobby, and musical instrument stores	4511	456,800	478,300	21,500	4.7
Miscellaneous nondurable goods merchant wholesalers	4249	360,500	377,200	16,700	4.6
Grocery and related product wholesalers	4244	709,000	736,100	27,100	3.8
Other miscellaneous store retailers	4539	296,700	307,900	11,200	3.8
Paper and paper product merchant wholesalers	4241	152,500	156,700	4,200	2.8
Machinery, equipment, and supplies merchant wholesalers	4238	675,800	692,700	16,900	2.5
Automotive parts, accessories, and tire stores	4413	491,800	495,700	3,900	0.8
Grocery stores	4451	2,462,600	2,478,700	16,100	0.7

Table 1.5. WRT subsectors (4-digit NAICS) with the largest projected employment decline by 2016, ranked by negative percent change.

WRT Subsector	NAICS	2006 Employment	2016 Employment	Numeric Change	% Change
Vending machine operators	4542	48,700	30,400	-18,300	-37.6
Direct selling establishments	4543	142,500	95,300	-47,200	-33.1
Petroleum and petroleum products merchant wholesalers	4247	100,600	69,500	-31,100	-30.9
Florists	4531	95,400	67,400	-28,000	-29.4
Farm product raw material merchant wholesalers	4245	72,600	53,100	-19,500	-26.9
Book, periodical, and music stores	4512	189,700	148,700	-41,000	-21.6
Office supplies, stationery, and gift stores	4532	379,200	299,900	-79,300	-20.9
Shoe stores	4482	181,700	148,700	-33,000	-18.2
Gasoline stations	4442	861,000	715,500	-145,500	-16.9
Lawn and garden equipment and supplies stores	4442	146,500	130,700	-15,800	-10.8
Specialty food stores	4452	228,700	210,900	-17,800	-7.8
Department stores	4521	1,550,900	1,437,600	-113,300	-7.3
Beer, wine, and liquor stores	4453	136,600	132,900	-3,700	-2.7
Apparel, piece goods, and notions merchant wholesalers	4243	150,000	146,400	-3,600	-2.4
Electronics and appliance stores	4431	538,400	531,900	-6,500	-1.2
Furniture stores	4421	299,700	297,100	-2,600	-0.9
Jewelry, luggage, and leather goods stores	4483	166,800	165,400	-1,400	-0.8

Employment Trends by Wholesale and Retail Trade Subsectors

Increasing Employment *(Table 1.4)*

BLS projects that the majority of 4-digit (NAICS) subsectors in WRT will experience an increase in employment by 2016. Among the fast growing retail subsectors are other motor vehicle dealers (30.2%), building material and supplies dealers (28.1%), other general merchant stores (27.4%), electronic shipping and mail order houses (21.4%), and home furnishing stores (16.2%). Wholesale sectors that are projected to undergo growth include electrical and electronic goods wholesalers (15.0%), professional and commercial equipment wholesalers (14.7%), drugs and druggists' sundries wholesalers (14.6%), wholesale electronic markets and agents/brokers (11.1%), and lumber and other construction materials wholesalers (11.0%).

Decreasing Employment *(Table 1.5)*

Retail subsectors which face declining employment include vending machine operators (37.6%), direct selling establishments (33.1%), florists (29.4%), book, periodicals, and music stores (21.6%), and office supplies, stationary, and gift stores (20.9%). Wholesale subsectors expected to shrink substantially by 2016 include petroleum and petroleum products wholesalers (30.9%) and farm product raw material wholesalers (26.9%).

Age *(Table 1.6 and Figure 1.6)*

The distribution of workers by age in wholesale trade is comparable with the age distribution across all industry sectors. Workers under the age of 25 are underrepresented in the wholesale trade workforce, and workers ages 25–64 are slightly overrepresented relative to the age distribution across all industry.

Workers within the retail trade subsector, however, are more evenly distributed across age groups than either wholesale trade or all of private industry. Many more younger workers (16–24 years of age) and older workers (65 years and older) work in retail than in any other sector. In fact, more than one fourth of all workers 55 years old and older work in retail jobs.

Table 1.6. Employment distribution by age (ages 16 years and older) in wholesale and retail trade subsectors, and the U.S. private sector, 2005.

Age (years)	U.S. Private Industry		Wholesale Trade			Retail Trade		
	Private Industry Employment (thousands)	% of Total Private Industry Employment	Wholesale Trade Employment (thousands)	% of Total Wholesale Trade Employment	% of Total Private Sector Employment for Age Group	Retail Trade Employment (thousands)	% of Total Retail Trade Employment	% of Total Private Sector Employment for Age Group
16-19	5,978	4.2	74	1.6	1.2	1,590	9.4	26.6
20-24	13,792	9.7	288	6.3	2.1	2,672	15.9	19.4
25-34	30,680	21.6	1,016	22.2	3.3	3,342	19.9	10.9
35-44	34,630	24.4	1,257	27.5	3.6	3,423	20.3	9.9
45-54	33,207	23.4	1,157	25.3	3.5	3,190	19	9.6
55-64	18,349	12.9	630	13.8	3.4	1,835	10.9	10
65 and older	5,094	3.6	157	3.4	3.1	774	4.6	15.2
Total	141,730		4,579			16,826		

Figure 1.6. Age distribution in the overall U.S. workforce and in the wholesale and retail trade subsectors, 2005.

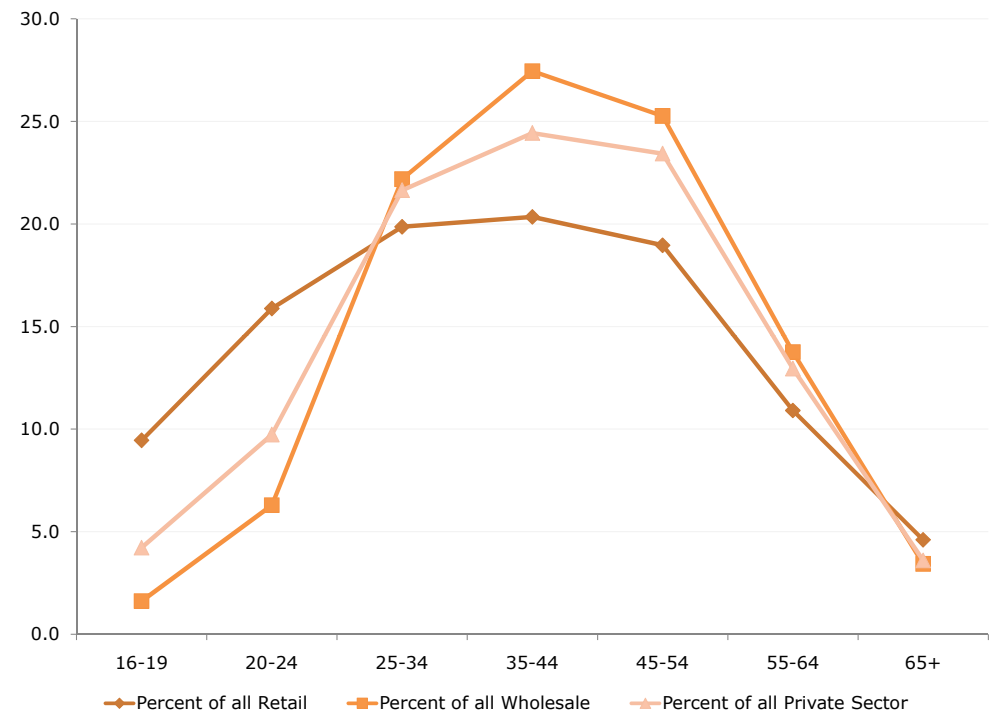
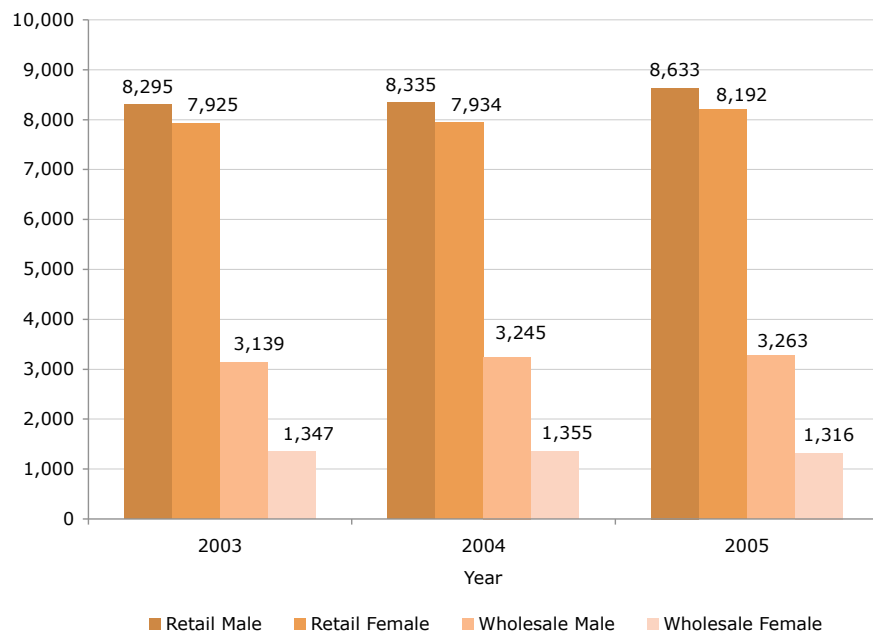


Figure 1.7. Gender trends within the worker populations in wholesale and retail trade, 2003–2005.

of Workers
(thousands)



Gender *(Figure 1.7)*

Across all industries, male workers represented 53.6% of the U.S. workforce compared with 46.4% for female workers. In 2005 the gender distribution of the WRT workforce was comparable, with males making up 55.6% and females 44.4%. When considered separately, however, wholesale trade and retail trade exhibit very different gender distributions. Retail trade employs proportionately more women than either wholesale trade or the private sector overall. In fact, the distribution ratio is nearly 50:50 in retail trade. Wholesale trade, by contrast has a disproportionate gender distribution with males dominating employment by approximately 70:30.

Race/Ethnicity *(Figures 1.8 and 1.9)*

BLS estimated that of the 21 million wholesale and retail trade workers, 76.3% are white, 11.5% are Hispanic or Latino, 8.3% are black or African American, and 3.9% are Asian. A significantly higher percentage of Hispanics or Latinos work in wholesale trade than other minority workers. In 2005 roughly 13.7% of workers in wholesale were Hispanic or Latino, while 6.8% were black or African American and 4.3% were Asian.

Figure 1.8. Race/ethnicity trends within the worker population in the wholesale trade sector, 2003–2005.

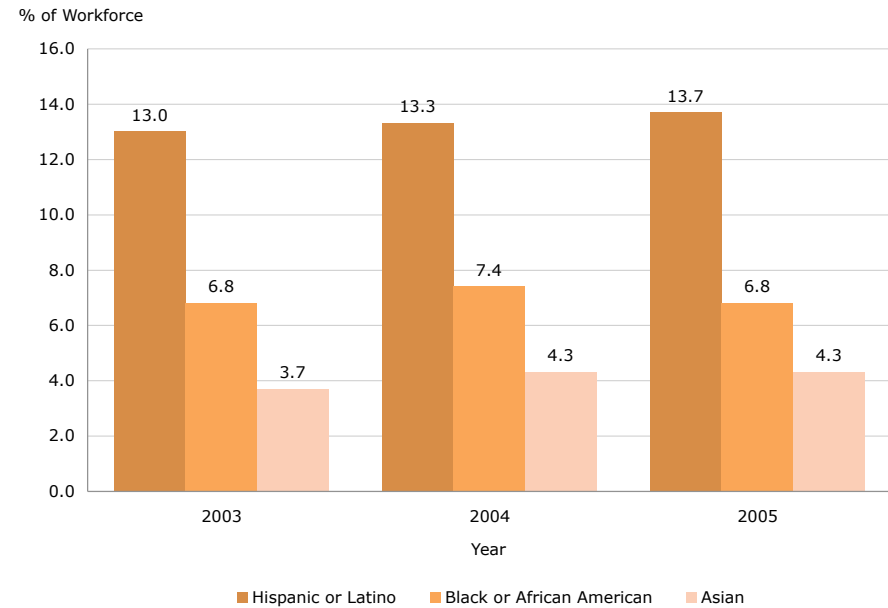


Figure 1.9. Race/ethnicity trends within the worker population in the retail trade sector, 2003–2005.

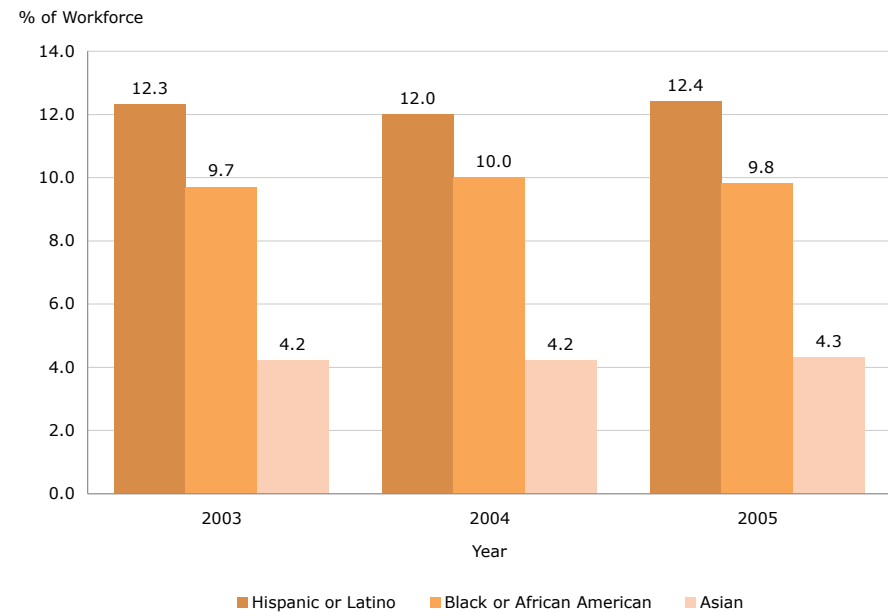


Figure 1.10. Employer costs per hour worked by employee in wholesale and retail trade, September 2006.

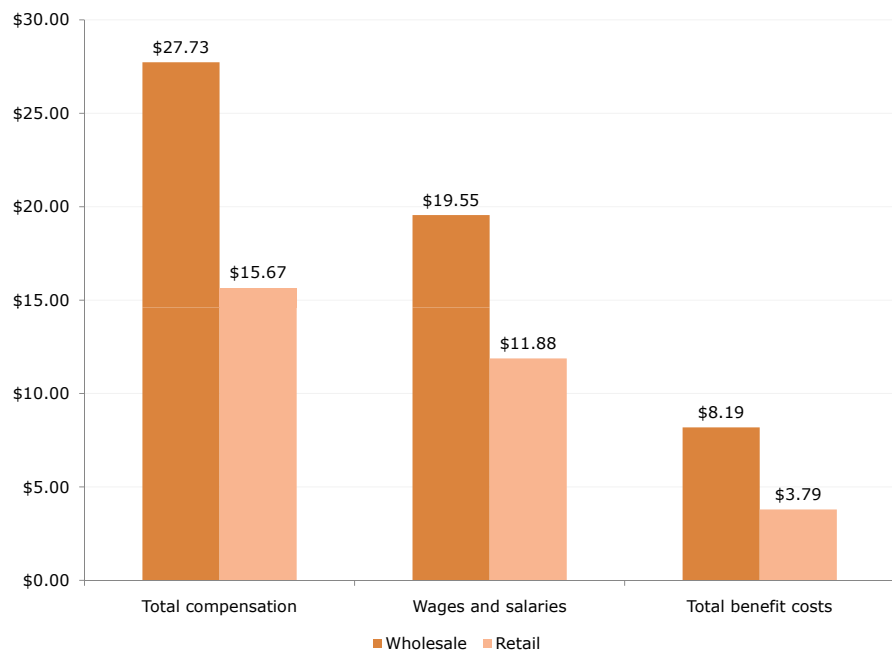
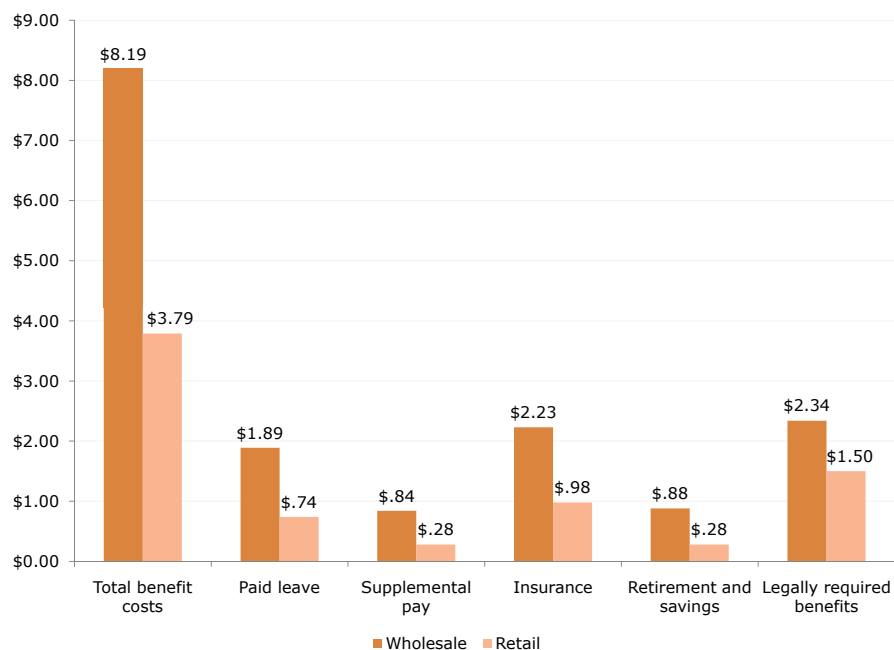


Figure 1.11. Breakdown of benefit costs per hour worked by employee in wholesale and retail trade, September 2006.



Economic Factors in Wholesale and Retail Trade

Compensation/Benefits *(Figures 1.10 and 1.11)*

In 2005 the average compensation cost for wholesale employers was \$27.73 per hour worked per employee. The average compensation cost for retail employers was \$15.67 per hour worked per employee. Of the average compensations, \$19.55 in wholesale and \$11.88 in retail are wages and salaries. The remainder, \$8.19 in wholesale and \$3.79 in retail, are total benefit costs.

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Chapter 2

Fatal Injuries Among Wholesale & Retail Trade Workers

Number of Fatal Injuries in Wholesale and Retail Trade *(Figure 2.1 and Table 2.1)*

In 2005, 609 workers in the WRT sector died as a result of traumatic injuries suffered at work. WRT ranked fourth among major industry sectors in worker fatalities behind construction (1,192 fatalities); transportation/warehousing (885); and agriculture, forestry, fishing and hunting (669). WRT had more worker fatalities than administration and support and waste management and remediation (398)—a sector that includes high-risk activities such as landscaping, waste management, and building services—and other traditionally high-risk sectors such as manufacturing (393), other services (210), and mining (159).

The 609 WRT fatalities represented nearly 12% of all worker deaths from traumatic injury in the private sector. Of these 609 deaths, 400 occurred in retail trade and 209 occurred in wholesale trade. *(Table 2.1).*

Figure 2.1. Number of fatalities by 2-digit NAICS sector, 2005.

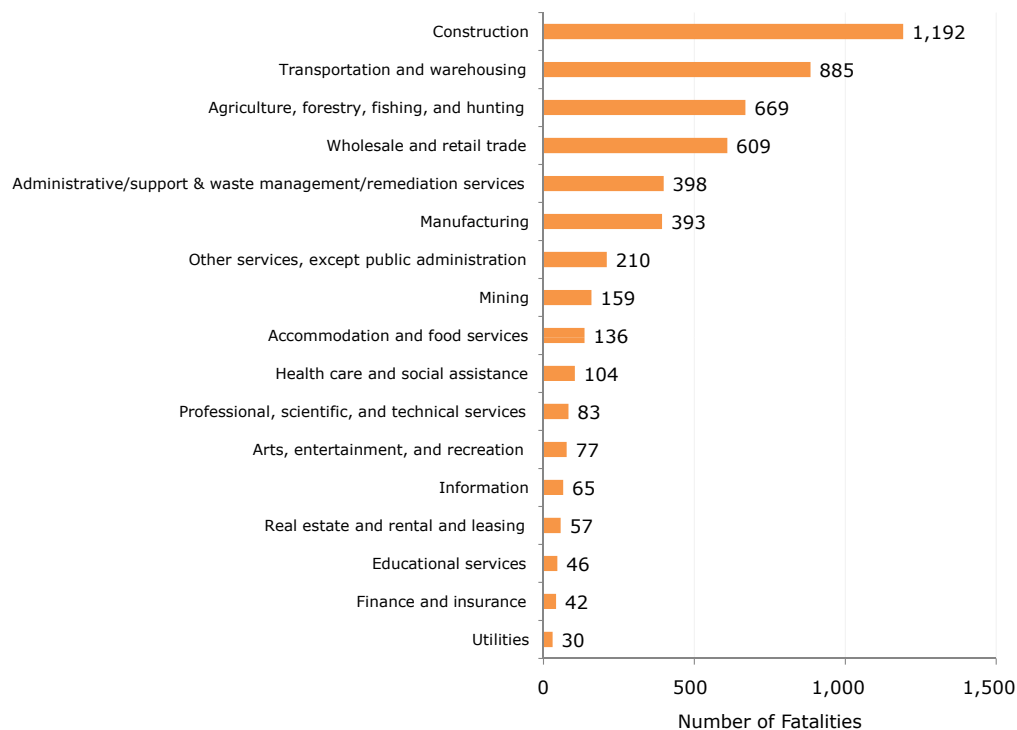
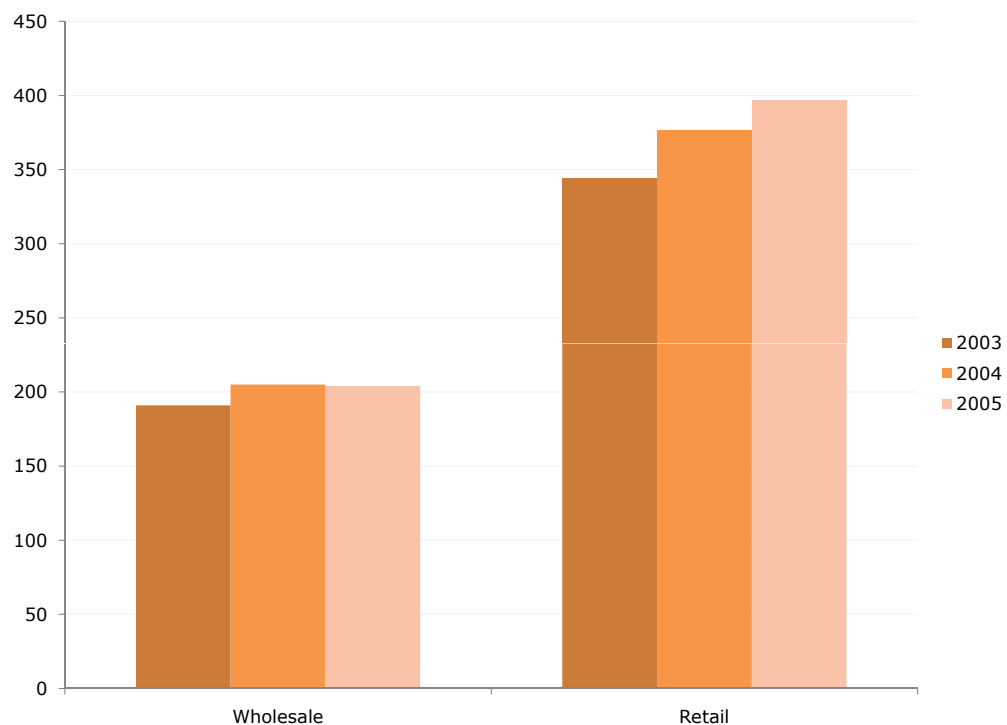


Table 2.1. Number of fatalities by 2-digit NAICS sector, 2005.

2-digit Industry	NAICS	Number of Fatalities	% of all Fatalities
Construction	23	1,192	22.9%
Transportation and warehousing	48, 49	885	17.0%
Agriculture, forestry, fishing, and hunting	11	669	12.8%
Wholesale and retail trade	42, 44, 45	609	11.7%
Administrative/support & waste management/remediation services	56	398	7.6%
Manufacturing	31–33	393	7.5%
Other services, except public administration	81	210	7.5%
Mining	21	159	3.0%
Accommodation and food services	72	136	2.6%
Health care and social assistance	62	104	2.0%
Professional, scientific, and technical services	54	83	1.6%
Arts, entertainment, and recreation	71	77	1.5%
Information	51	65	1.2%
Real estate and rental and leasing	52	57	1.1%
Educational services	61	46	0.9%
Finance and insurance	52	42	0.8%
Utilities	22	30	0.6%

Figure 2.2. Number of fatalities in retail trade and wholesale trade, 2003–2005.

Fatality Trend in Wholesale and Retail Trade

(Figure 2.2)

BLS data for 2003–2005 indicate that fatal workplace injuries were on the rise in both wholesale and retail trades. From 2003–2005, fatalities resulting from traumatic injuries increased by 16.3% in retail trade, and 9.4% in wholesale trade.

Rate of Fatal Injuries in Wholesale and Retail Trade

(Table 2.2)

The fatality rate (deaths per 100,000 workers) in 2005 for WRT combined is 2.9. The rate for wholesalers was nearly double that of retailers (4.6 and 2.4, respectively).

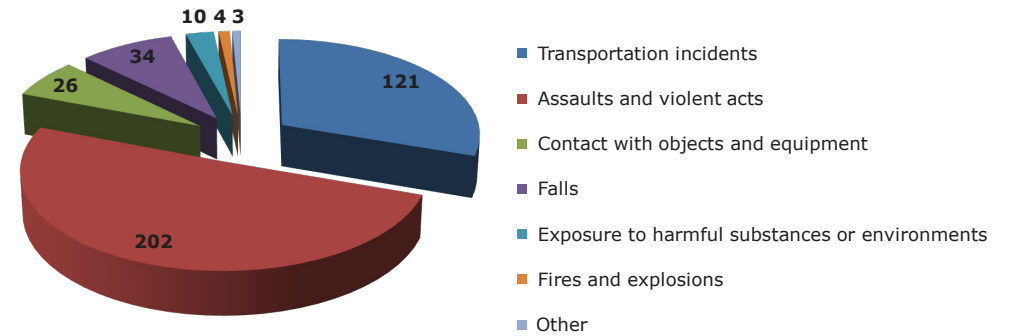
Table 2.2. Rate (per 100,000 workers) of fatal injuries by 2-digit NAICS sector, 2005.

2-digit Industry	NAICS	Fatality Rate
Agriculture, forestry, fishing, and hunting	11	32.5
Mining	21	25.6
Transportation and warehousing	48, 49	17.7
Construction	23	11.1
Administrative/support & waste management/remediation services	56	7.2
Utilities	22	3.6
Arts, entertainment, and recreation	71	3.2
Other services, except public administration	81	3.0
Wholesale and retail trade	42, 44, 45	2.9
Wholesale trade	42	4.6
Retail trade	44, 45	2.4
Manufacturing	31–33	2.4
Information	51	2.0
Real estate and rental and leasing	52	1.9
Accommodation and food services	72	1.5
Educational services	61	1.3
Professional, scientific, and technical services	54	1.0
Health care and social assistance	62	0.7
Finance and insurance	52	0.6

Events/Exposures Associated with Fatal Injuries in Retail Trade *(Figure 2.3)*

Of the 400 fatalities among retail workers, over half resulted from assaults and violent acts, another 30% resulted from transportation incidents; 9% from falls; 7% from contact with objects/equipment; 3% from exposure to harmful substances/environments; and 1% from fires/explosions.

Figure 2.3. Fatal injuries by events/exposures, retail trade, 2005.



Events/Exposures Associated with Fatal Injuries in Wholesale Trade *(Figure 2.4)*

Assaults and violent acts are far less prevalent in wholesale trade, causing about 6% of the 209 workplace deaths among wholesalers in 2005. The leading cause or event associated with fatalities in wholesale trade in 2005 was transportation incidents (51%). Contact with objects/equipment contributed to 23% of the deaths, and falls, exposure to harmful substances/environments, and fires/explosions accounted for 9%, 7%, and 4% of the deaths, respectively.

Figure 2.4. Fatal injuries by events/exposures, wholesale trade, 2005.

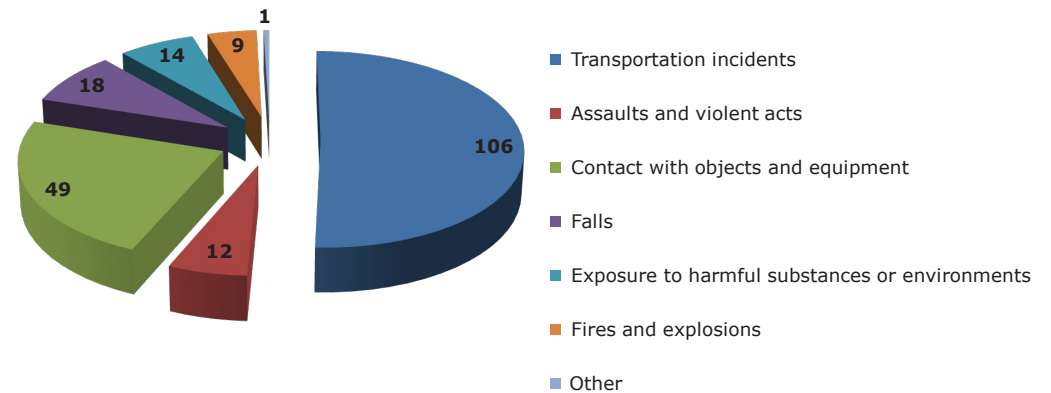


Figure 2.5. Fatal occupational injuries in the wholesale and retail trade sector by state, 2003–2005.

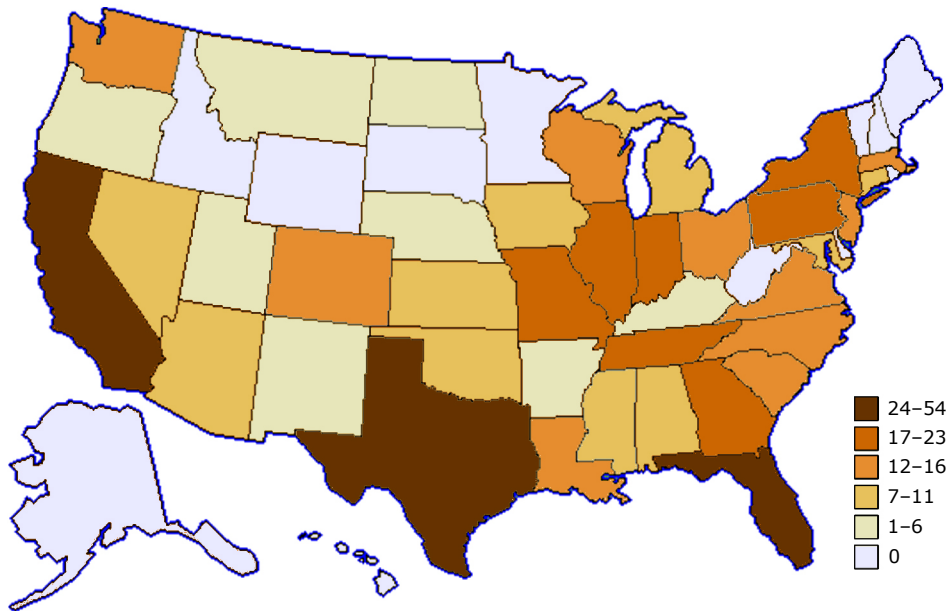


Table 2.3. Occupations with the highest number of fatal work injuries in wholesale and retail trade, 2005.

Occupation	Retail	Wholesale	Total WRT
Sales and Related Occupations	215	45	260
Transportation and Material Moving Occupations	99	100	199
Installation, Maintenance, and Repair Occupations	26	32	58
Office and Administrative Support Occupations	26	0	26
Production Occupations	8	8	16
Construction and Extraction Occupations	3	7	10
Arts, Design, Entertainment, Sports, and Media Occupations	4	0	4
Farming, Fishing, and Forestry Occupations	0	3	3
Protective Service Occupations	3	0	3

Distribution of Fatal Injuries by State in Wholesale and Retail Trade *(Figure 2.5)*

Of all the United States, California (54), Florida (49), and Texas (42) had the highest number of worker deaths in WRT in 2005, followed by Pennsylvania (33), New York (30), Indiana (23) and Illinois (23). Twenty-three states had 10 or more worker deaths resulting from traumatic injury in the WRT sector. Fourteen states (shown in white on the map) had no worker deaths from traumatic injury in the WRT sector.

Distribution of Fatal Injuries by Occupation in Wholesale and Retail Trade *(Table 2.3)*

Sales and sales-related occupations experienced the highest number of fatal occupational injuries (260) in the trade sector, with transportation and material moving occupations suffering the next highest number of deaths (199). Traumatic fatalities occurred progressively less frequently among installation, maintenance, and repair; office and administrative support; production; and construction and extraction occupations.

Distribution of Fatal Injuries by Subsectors in Retail Trade *(Table 2.4)*

WRT comprises 146 distinct types of business. Generally, trade activities are perceived to be less hazardous for workers than “heavier” industries such as agriculture, forestry, fishing and hunting; construction; transportation/warehousing, manufacturing, and mining. However, certain of the 146 subsectors are more hazardous than they appear to be. Retail trade subsectors that experience the highest number of fatalities include grocery stores, gasoline stations, automobile dealers, and building materials and supplies dealers. Chapter 4 contains more detailed data related to risks in WRT subsectors.

Distribution of Fatal Injuries by Subsectors in Wholesale Trade *(Table 2.5)*

Wholesale trade subsectors that experience the highest number of worker deaths from traumatic injuries include miscellaneous durable goods; machinery, equipment, and supplies; and grocery and related products.

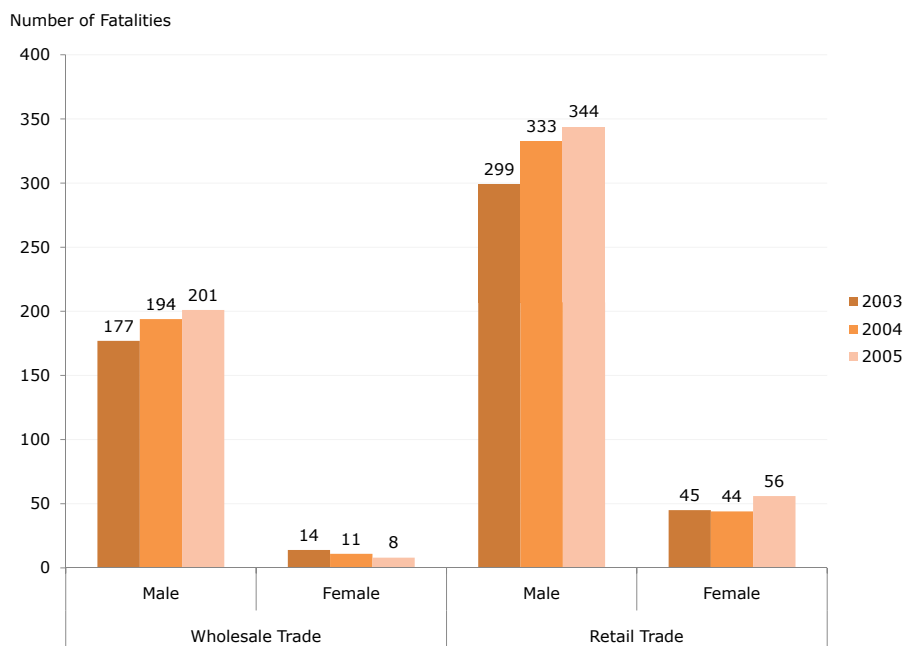
Table 2.4. Number of fatalities by 4-digit retail trade subsector, 2005.

4-digit Industry	NAICS	Number of Fatalities
Grocery stores	4451	84
Gasoline stations	4471	58
Automobile dealers	4411	43
Building materials and supplies dealers	4441	39
Direct selling establishments	4543	21
Automotive parts, accessories, and tire stores	4413	20
Other miscellaneous store retailers	4539	15
Specialty food stores	4452	13
Other general merchandise stores	4529	11
Other motor vehicle dealers	4412	10

Table 2.5. Number of fatalities by 4-digit wholesale trade subsector, 2005.

4-digit Industry	NAICS	Number of Fatalities
Miscellaneous durable goods	4239	29
Machinery, equipment, and supplies	4238	26
Grocery and related products	4244	26
Petroleum and petroleum products	4247	19
Miscellaneous nondurable goods	4249	15
Farm products and raw materials	4245	14
Professional and commercial equipment, supplies	4234	12
Chemical and allied products	4246	8
Wholesale electronic markets, agents, brokers	4251	7

Figure 2.6. Fatal occupational injuries in wholesale and retail trade by gender, 2003–2005.



Distribution of Fatal Injuries by Gender in Wholesale Trade and Retail Trade *(Figure 2.6)*

In both wholesale and retail trade, fatal injuries to male workers appeared to be trending upward from 2003–2005. In wholesale trade, the proportion of male deaths increased from 92.7% in 2003 to 96.2% in 2005, yet the proportion of male deaths in retail showed more fluctuation (ranging from 86.9% in 2003, to 88.3% in 2004, then falling to 86.0% in 2005).

Distribution of Fatal Injuries by Gender in Private Industry *(Figure 2.7)*

Across all private industry, the distribution of fatal injuries by gender remained fairly static, with deaths of males representing from 92.4% (2003) to 93.5% (2004) of the total, before dropping to 93.4% in 2005.

Figure 2.7. Fatal occupational injuries in the U.S. private industry by gender, 2003–2005.

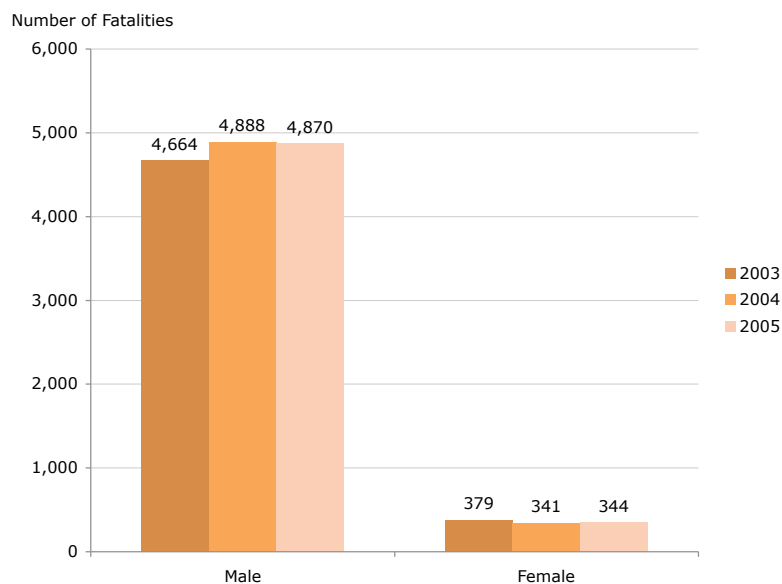
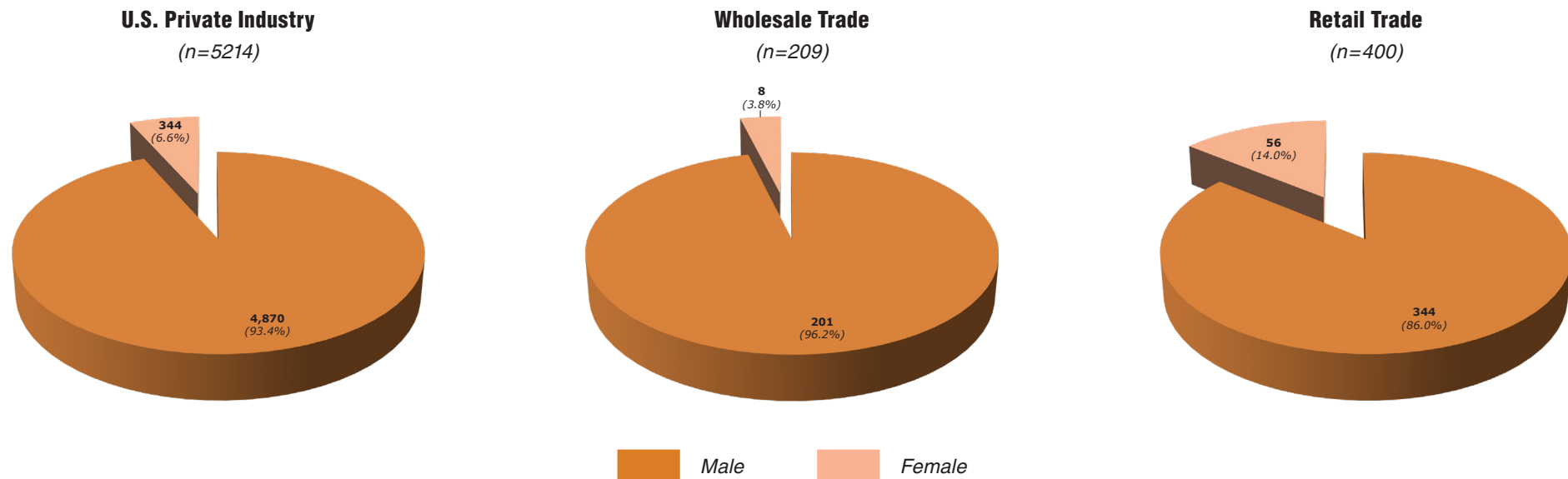
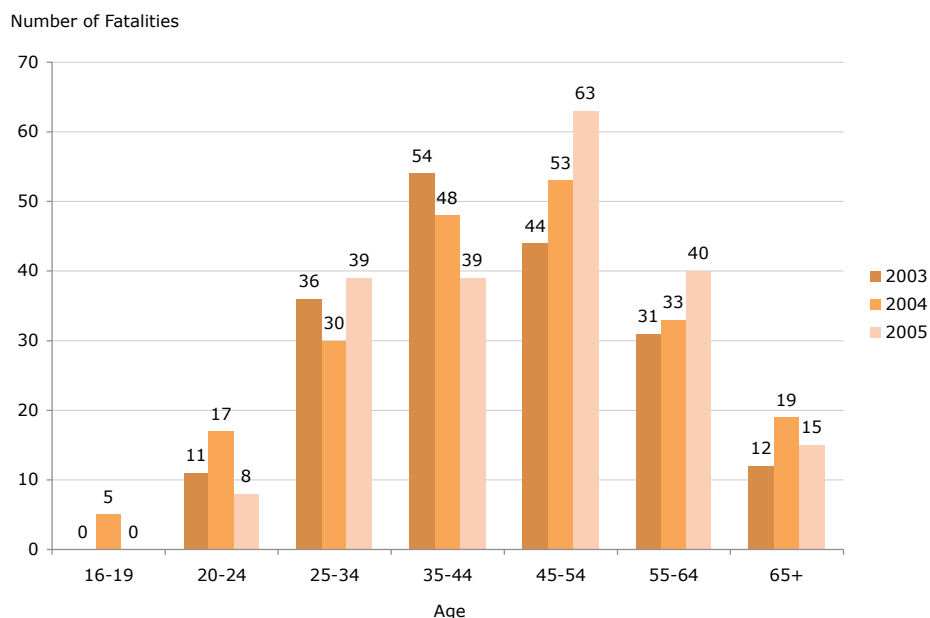
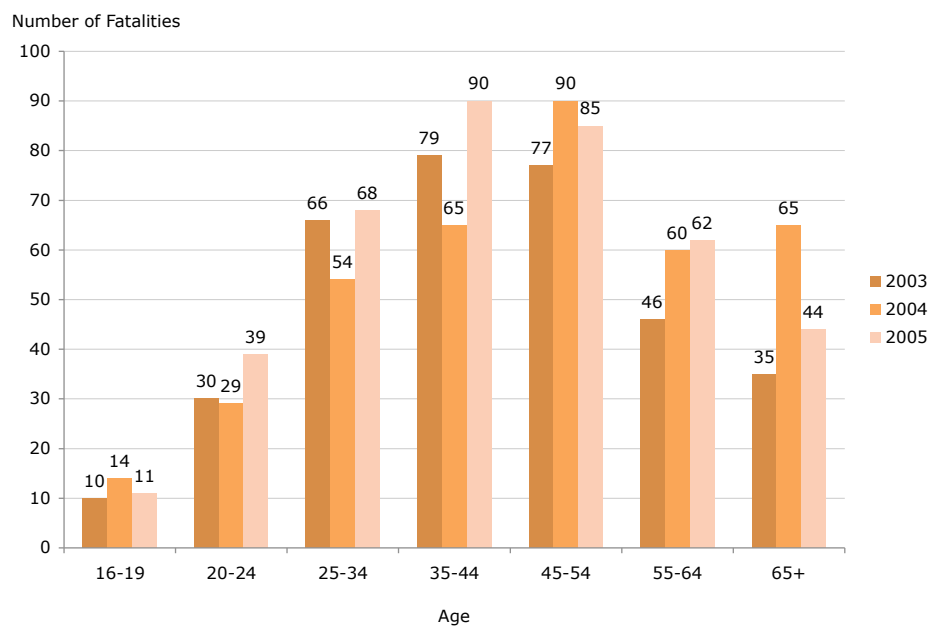


Figure 2.8. Distribution of fatal occupational injuries in the U.S. private industry, wholesale trade, and retail trade by gender, 2005.



Distribution of Fatal Injuries by Gender in Wholesale and Retail Trade *(Figure 2.8)*

In 2005 across all private industry, workplace fatalities were split about 93% to 7% among male and female workers, respectively. The distributions in wholesale (96% to 4%) and retail (86% to 14%) differed from the private sector average.

Figure 2.9. Fatalities in wholesale trade by age, 2003–2005.**Figure 2.10.** Fatalities in retail trade by age, 2003–2005.

Distribution and Trend in Fatal Injuries by Age in Wholesale Trade *(Figure 2.9)*

The distribution of fatal injuries by age group was similar to the distribution across all industries, with far fewer deaths occurring among very young and very old workers. A shift is apparent from 2003–2005 in the number of deaths among workers in the middle age groups, with the highest number in the 35–44 years group in 2003, shifting to the 45–54 years group in 2004 and 2005.

Distribution and Trend in Fatal Injuries by Age in Retail Trade *(Figure 2.10)*

In retail trade, there were many more deaths, proportionately, in the 65 and older age group than in wholesale trade or across all private industry. In 2004 the 65 deaths among workers age 65 and older was second (along with the 65 deaths among 35–44 year-olds) only to the 90 deaths among workers ages 45–54.

Distribution and Trend in Fatal Injuries by Race/Ethnicity in Wholesale Trade *(Figure 2.11)*

Fatally injured workers in wholesale trade were predominantly white (159 deaths in 2005), followed by Hispanics or Latinos (35 deaths in 2005), and blacks or African Americans (11 deaths in 2005).

Distribution and Trend in Fatal Injuries by Race/Ethnicity in Retail Trade *(Figure 2.12)*

In the retail sector, excluding the 249 deaths of white workers in 2005, fatal, work-related injuries were more evenly distributed across other racial/ethnic groups, with 56 blacks or African Americans, 45 Asians, and 42 Hispanics or Latinos dying of workplace trauma.

Figure 2.11. Fatalities in wholesale trade by race/ethnicity, 2003–2005.

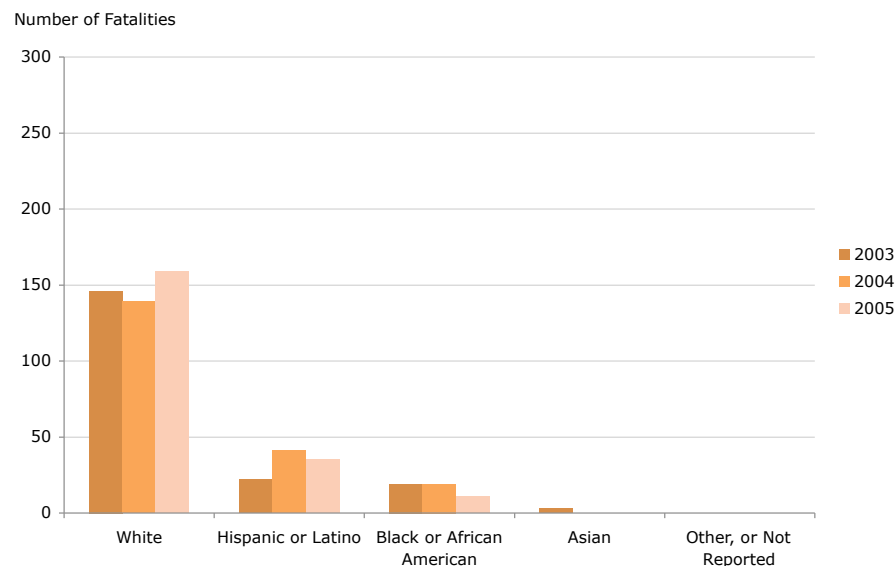
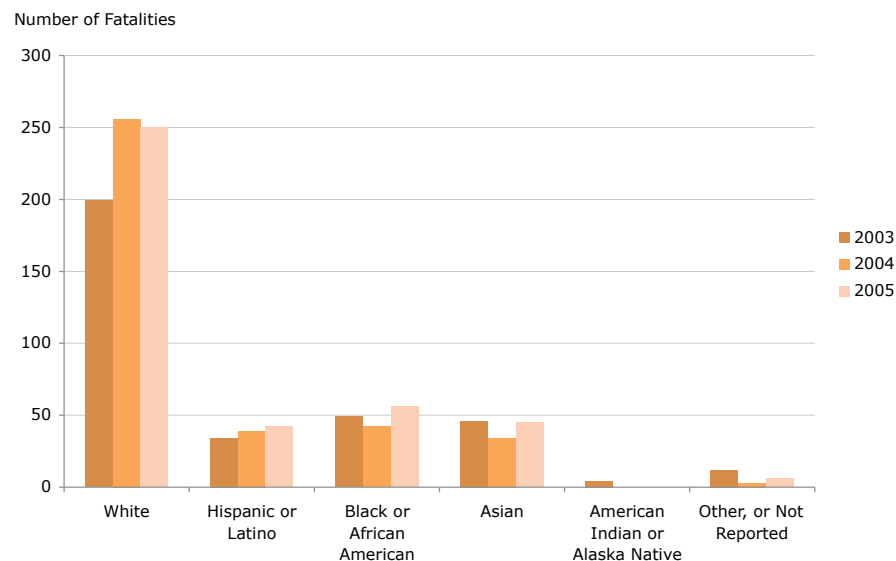


Figure 2.12. Fatalities in retail trade by race/ethnicity, 2003–2005.



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2. BLS [2005]. Census of Fatal Occupational Injuries. Fatal occupational injuries, employment, and rates of fatal occupational injuries by selected worker characteristics, occupations, and industries, 2005. www.bls.gov/iif/oshwc/cfoi/CFOI_Rates_2005.pdf. Last accessed, February 25, 2009. (Table 2.2)
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4. BLS [2009]. Injuries, Illnesses, and Fatalities. Multi-Screen Data Search. Access data query table at: <http://www.bls.gov/iif/data.htm>. Click on "Multi-Screen Data Search" button for "Census of Fatal Occupational Injuries (2003 forward)" database. Search on parameters: Area="N00 all U.S."; Case type="1 Fatalities by detailed private industry"; Category=(select all occupational categories); Industry="SP2RET Retail trade" and "SP2WHT Wholesale trade"; Click on "Retrieve Data" button; Year: 2005. (Table 2.3)
5. BLS [2009]. Injuries, Illnesses, and Fatalities. Multi-Screen Data Search. Access data query table at: <http://www.bls.gov/iif/data.htm>. Click on "Multi-Screen Data Search" button for "Census of Fatal Occupational Injuries (2003 forward)" database. Search on parameters: Area="N00 all U.S."; Case type="1 Fatal injury by detailed private industry"; Category = "Gender-- Male", "Gender-- Female"; Industry="SP2RET Retail trade" and "SP2WHT Wholesale trade"; Click on "Retrieve Data" button; Years: 2003-2005
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(Figure 2.11, Figure 2.12)

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Chapter 3

Nonfatal Injuries/Illnesses Among Wholesale & Retail Trade Workers

Number of Nonfatal Injuries/Illnesses in Wholesale and Retail Trade *(Table 3.1)*

In 2005 the WRT sector had more nonfatal injuries/illnesses (849,700) than any major industry sector except manufacturing (895,900), and more injuries/illnesses experienced in WRT were severe enough to result in days away from work (DAW) (256,100) than those in any other industry, including manufacturing (209,100). The toll in WRT exceeded that of industry sectors traditionally viewed as high-risk, including construction (414,900); transportation/warehousing (280,500); agriculture, forestry, fishing and hunting (54,600); and various service sectors, most notably health care and social assistance services (668,900), and accommodation and food services (326,400).

Events/Exposures Associated with Nonfatal Injuries/Illnesses in Wholesale and Retail Trade *(Figure 3.1)*

The leading events/exposures resulting in nonfatal injuries/illnesses with DAW in the WRT sector were overexertion (74,650 injuries, representing 29.1% of all DAW injuries in the sector) and contact with objects/equipment (67,270; 26.3%). Falls on the same level accounted for 13.9% of all DAW injuries/illnesses in WRT, followed by transportation incidents (6.4%) and falls to lower level (4.0%). See Figures 3.2 and 3.3 for distribution of events/exposures associated with nonfatal injuries and illnesses in the wholesale trade and retail trade sectors individually.

Table 3.1. Nonfatal injury/illness cases by 2-digit NAICS, total cases, and days away from work cases, 2005.

Industry	NAICS Code	Total Recordable Cases	Cases with Days Away from Work (DAW)
Manufacturing	31-33	895,900	209,100
Wholesale and retail trade	42, 44, 45	849,700	256,100
Health care and social assistance	62	668,900	175,900
Construction	23	414,900	157,100
Accommodation and food services	72	326,400	75,700
Transportation and warehousing	48, 49	280,500	117,400
Administrative and support and waste management and remediation services	56	165,400	57,300
Other services, except public administration	81	94,800	28,800
Professional, scientific, and technical services	54	87,700	24,800
Arts, entertainment, and recreation	71	72,100	18,200
Real estate and rental and leasing	53	66,400	14,200
Information	51	58,900	20,700
Agriculture, forestry, fishing, and hunting	11	54,600	18,900
Finance and insurance	52	54,200	14,100

Figure 3.1. Nonfatal injury/illness cases involving days away from work by event/exposure, wholesale and retail trade, 2005.

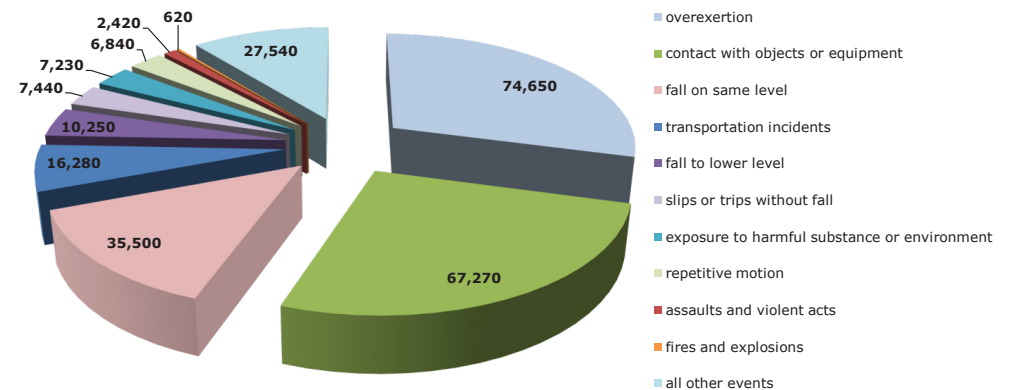
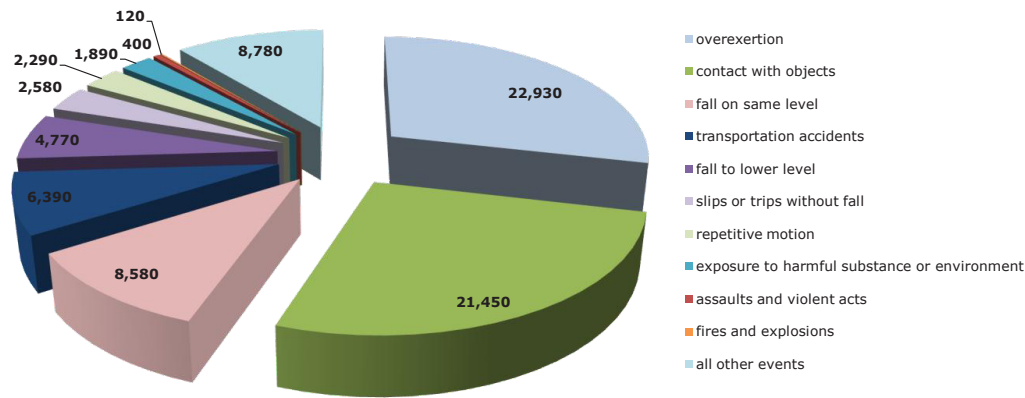


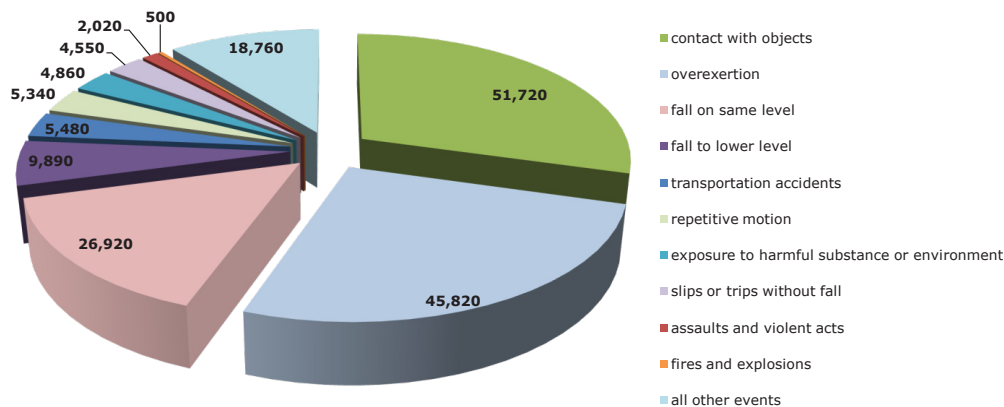
Figure 3.2. Nonfatal injury/illness cases involving days away from work by event/exposure, wholesale trade, 2005.



Events/Exposures Associated with Nonfatal Injuries/Illnesses in Wholesale Trade (Figure 3.2)

The leading event producing nonfatal injuries/illnesses in wholesale trade was overexertion (22,930 cases), followed by contact with object/equipment (21,450), fall on same level (8,580), and transportation incidents (6,390).

Figure 3.3. Nonfatal injury/illness cases involving days away from work by event/exposure, retail trade, 2005.



Events/Exposures Associated with Nonfatal Injuries/Illnesses in Retail Trade (Figure 3.3)

The distribution differed between wholesale and retail in the following ways: (1) contact with object/equipment was the leading cause of nonfatal injuries/illnesses within retail trade (51,720), ahead of overexertion (45,820). Although like wholesale, fall on the same level was the third leading exposure causing injuries/illnesses (26,920), unlike wholesale, fall to lower level cases (9,890) exceeded those caused by transportation incidents (5,480).

Rates of Nonfatal Injuries/Illnesses in Wholesale and Retail Trade *(Table 3.2)*

The incidence rates for nonfatal injuries/illnesses (number of cases per 10,000 full-time workers) in the WRT sector were not among the highest in 2005. Transportation/warehousing (7.0 cases per 10,000 full-time workers) had the highest rate among 2-digit NAICS sectors, followed by manufacturing (6.3); construction (6.3); arts, entertainment, and recreation (6.1); and agriculture, forestry, fishing and hunting (6.1). Both retail trade (5.0) and wholesale trade experienced total case rates (5.0 and 4.5, respectively) nearly equal to the rate experienced by private industry overall (4.6). A similar pattern was seen in rates of injuries and illnesses that resulted in days away from work in 2005, with “heavier” industries such as transportation, construction, and agriculture showing higher rates (2.9, 2.4, and 2.1, respectively), and wholesale trade and retail trade with rates (1.5 each) closer to the private industry average.

Rates of Nonfatal Injuries/Illnesses by Selected Events/Exposures in U.S. Private Industry, Wholesale Trade, and Retail Trade *(Figure 3.4)*

Although overall rates of nonfatal injuries/illnesses are similar among wholesale trade, retail trade, and private industry, differences are noted when rates are calculated for the events or exposures that lead to injuries and illnesses. Both wholesale and retail operations had higher rates of injury and illness from overexertion and contact with object/equipment than private industry overall. Rates of injury/

Table 3.2. Nonfatal injury/illness case rates (per 10,000 workers) by 2-digit NAICS, total case rates, and days away from work case rates, 2005.

Industry	NAICS Code	Total Recordable Case Rate	Case Rates with Days Away from Work (DAW)
Transportation and warehousing	48, 49	7.0	2.9
Manufacturing	31–33	6.3	1.5
Construction	23	6.3	2.4
Arts, entertainment, and recreation	71	6.1	1.6
Agriculture, forestry, fishing and hunting	11	6.1	2.1
Health care and social assistance	62	5.9	1.6
Retail trade	44, 45	5.0	1.5
Utilities	22	4.6	1.3
Accommodation and food services	72	4.5	1.0
Wholesale trade	42	4.5	1.5
Administrative and support and waste management and remediation services	56	3.7	1.3
Real estate and rental and leasing	53	3.7	1.3
Mining	21	3.6	1.5
Other services, except public administration	81	3.2	1.0

Figure 3.4. Incidence rates (per 10,000 workers) for nonfatal occupational injuries/illnesses involving days away from work by events/exposures, U.S. private industry, wholesale trade, and retail trade, 2005.

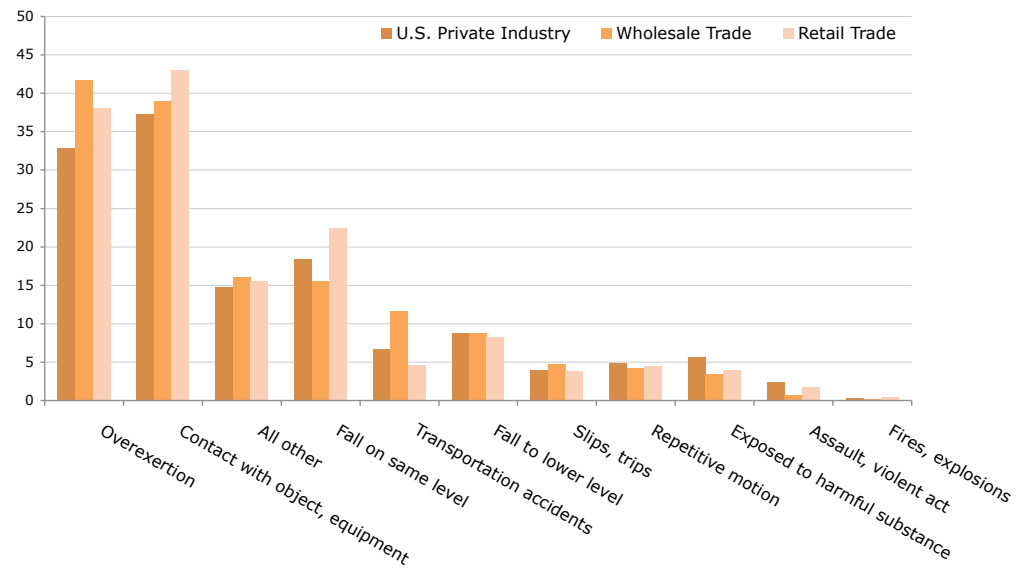
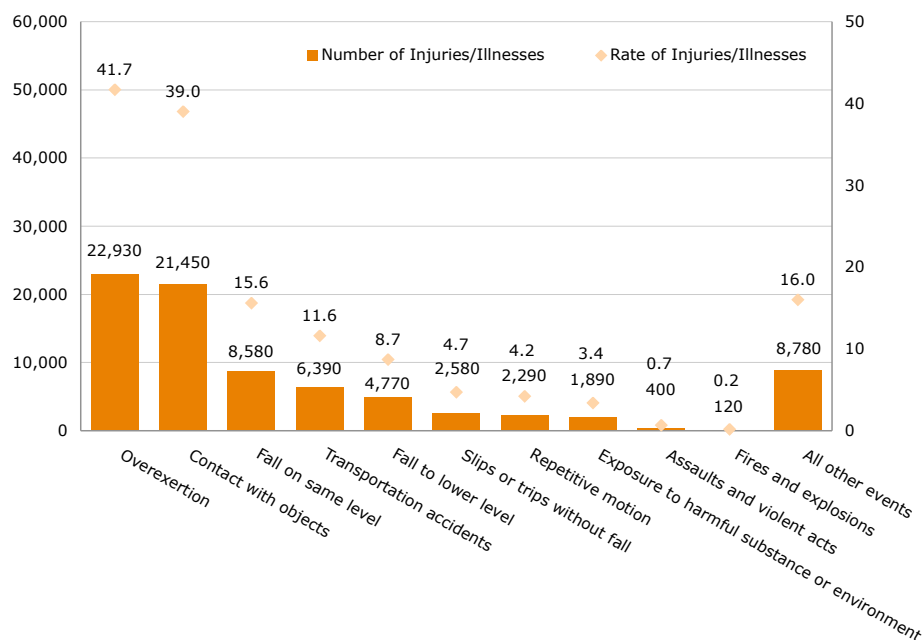


Figure 3.5. Numbers and rates (per 10,000 workers) of nonfatal injury/illness cases involving days away from work by event/exposure, wholesale trade sector, 2005.

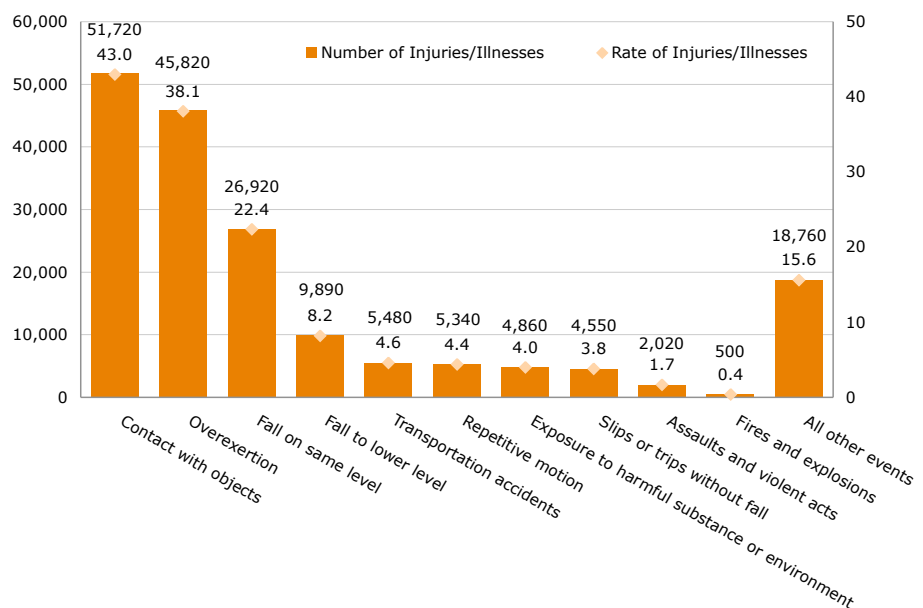


illness from falls on the same level are higher in retail, and rates of injury/illness from transportation incidents are higher in wholesale, than the counterpart rates for all private industries combined.

Numbers and Rates of Nonfatal Injuries/Illnesses by Events/Exposures in Wholesale Trade and Retail Trade (Figures 3.5 and 3.6)

In wholesale trade, rates of injury/illness from overexertion (41.7 cases per 10,000 workers) and contact with object/equipment (39.0) were similar to the rates in retail trade (38.1 and 43.0, respectively), although the numbers of injuries/illnesses resulting from these events were more than doubled in retail. Rates showed much wider differences for transportation incidents (11.6 in wholesale; 4.6 in retail), and falls on same level (22.4 in retail; 15.6 in wholesale).

Figure 3.6. Numbers and rates (per 10,000 workers) of nonfatal injury/illness cases involving days away from work by event/exposure, retail trade sector, 2005.



Rates and Numbers of Nonfatal Injuries/Illnesses by Nature of Injury in U.S. Private Industry, Wholesale Trade, and Retail Trade *(Figure 3.7 and 3.8)*

Sprains and strains were by far the leading nature of injury/illness experienced by all U.S. workers across private industry in 2005.

Rates of days away from work for sprain/strain injuries among WRT workers were well above the private industry average in 2005.

Figure 3.7. Incidence rates (per 10,000 workers) for nonfatal occupational injuries/illnesses involving days away from work by nature of injury/illness, U.S. private industry, wholesale trade, and retail trade, 2005.

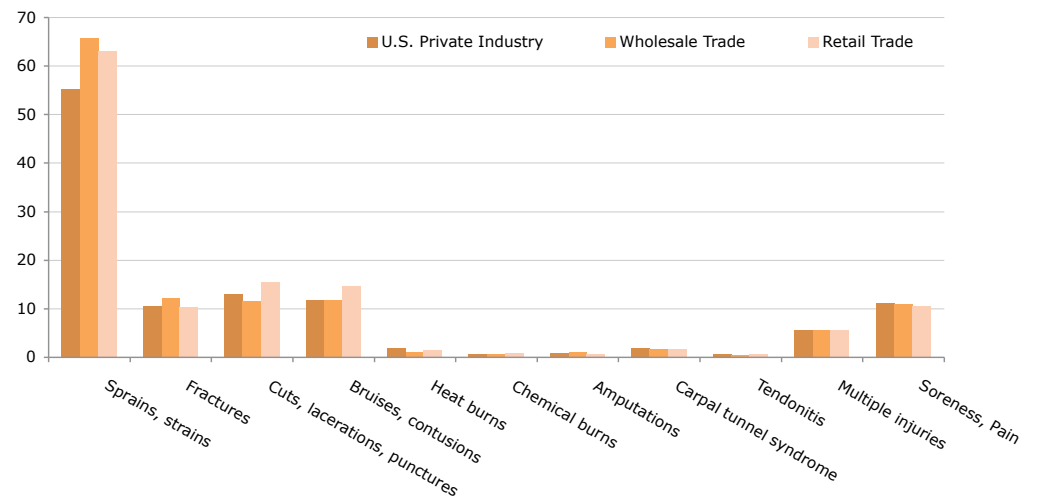


Figure 3.8. Numbers of nonfatal injury/illness cases by nature of injury/illness, wholesale trade and retail trade, 2005.

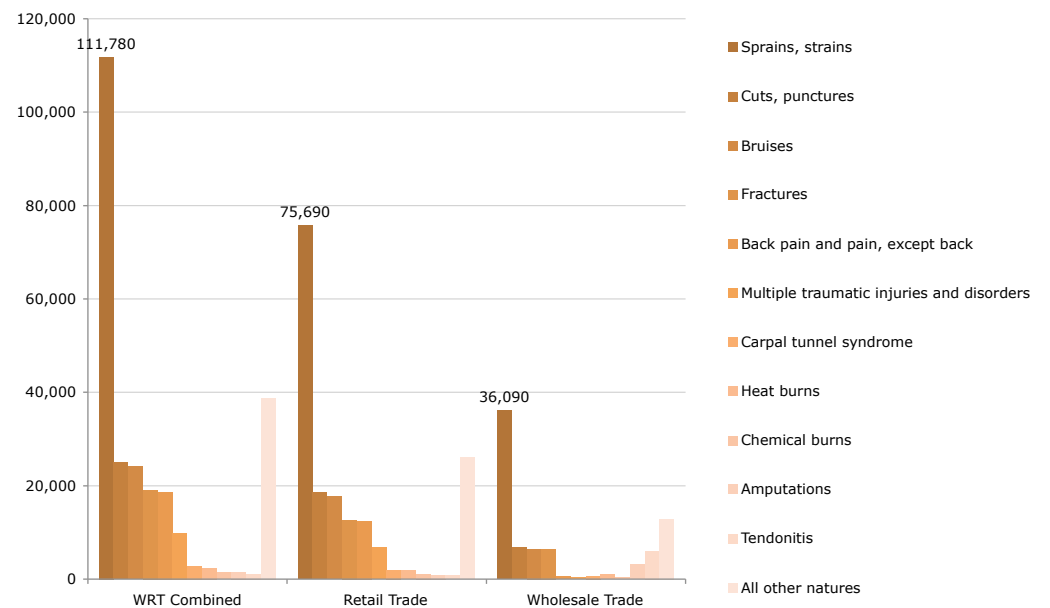
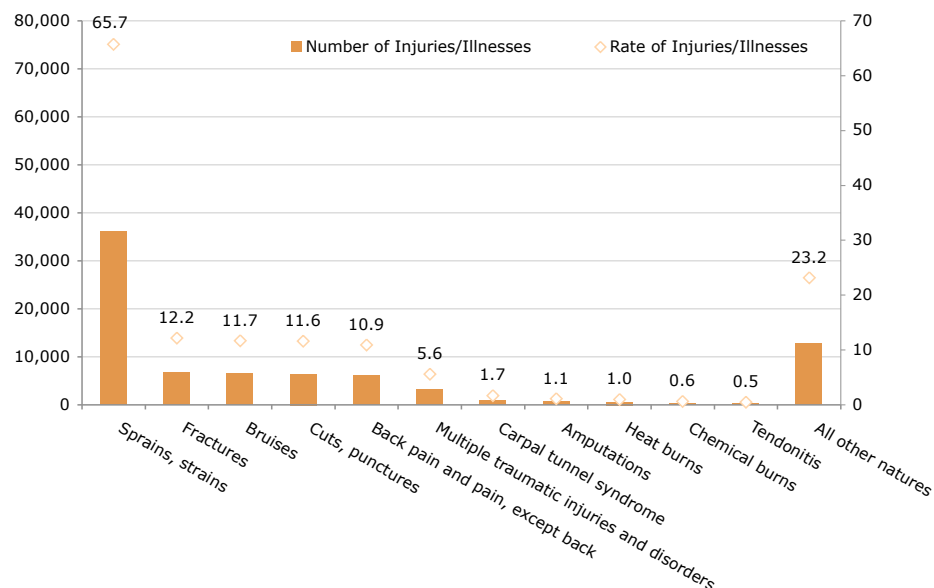


Figure 3.9. Numbers and rates (per 10,000 workers) of nonfatal injury/illness cases involving days away from work by nature of injury, wholesale trade sector, 2005.

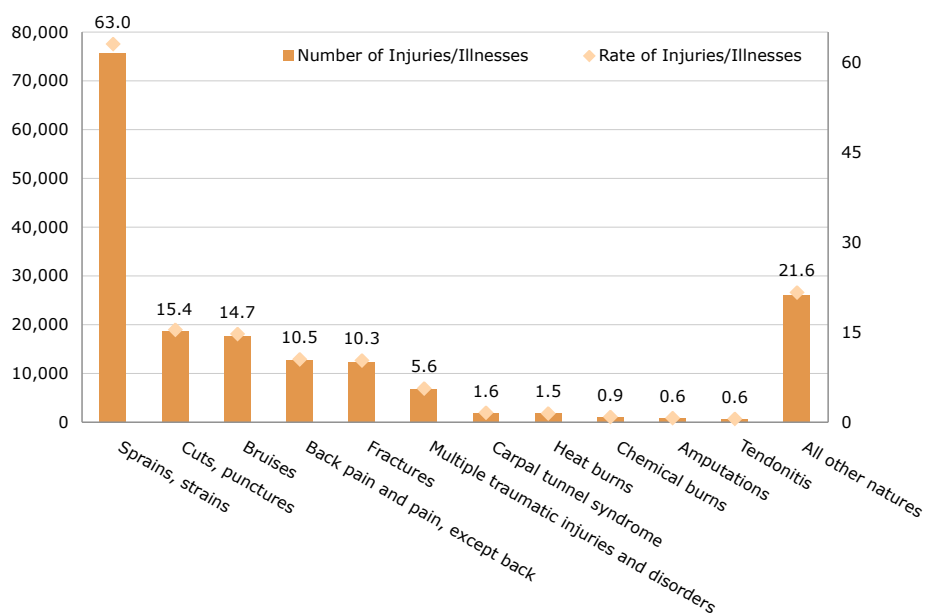


Numbers and Rates of Nonfatal Injuries/Illnesses by Selected Nature of Injury Categories in Wholesale Trade and Retail Trade (Figures 3.9 and 3.10)

Other than sprains/strains, the predominant nature of nonfatal injury/illness in WRT in 2005, wholesale workers experienced a higher rate of fractures than retail workers. Rates among retail workers exceeded those for wholesale workers for cuts, punctures (15.4 and 11.6, respectively) and bruises (14.7 and 11.7, respectively) and tendonitis (21.6 and 23.2, respectively).

Rates of all other natures of injury/illness were similar in the two major trade subsectors.

Figure 3.10. Numbers and rates (per 10,000 workers) of nonfatal injury/illness cases involving days away from work by nature of injury, retail trade sector, 2005.



Rates of Injuries/Illnesses by Source of Injury/Illness, Private Industry, Wholesale Trade, and Retail Trade *(Figures 3.11 and 3.12)*

Wholesale and retail trade operations are centered upon the movement and storage of products. It is no surprise that containers was the source of injury/illness category most often associated with nonfatal injuries/illnesses. Rates of injury/illness in both the wholesale and retail sectors where the source of injury/illness was container was nearly double the private industry rate. The rate of injury/illness for which vehicles was the source of injury/illness was much higher in wholesale trade than either retail trade or the overall private industry. Floors and other ground surfaces, and furniture/fixtures were source of injury/illness categories associated with higher rates of injury/illness in retail trade than in either wholesale trade or overall private industry.

Figure 3.11. Incidence rates (per 10,000 workers) for nonfatal occupational injuries/illnesses involving days away from work by source of injury/illness, U.S. private industry, wholesale trade, and retail trade, 2005.



Figure 3.12. Numbers of nonfatal occupational injuries/illnesses involving days away from work by source of injury/illness, U.S. private industry, wholesale trade, and retail trade, 2005.

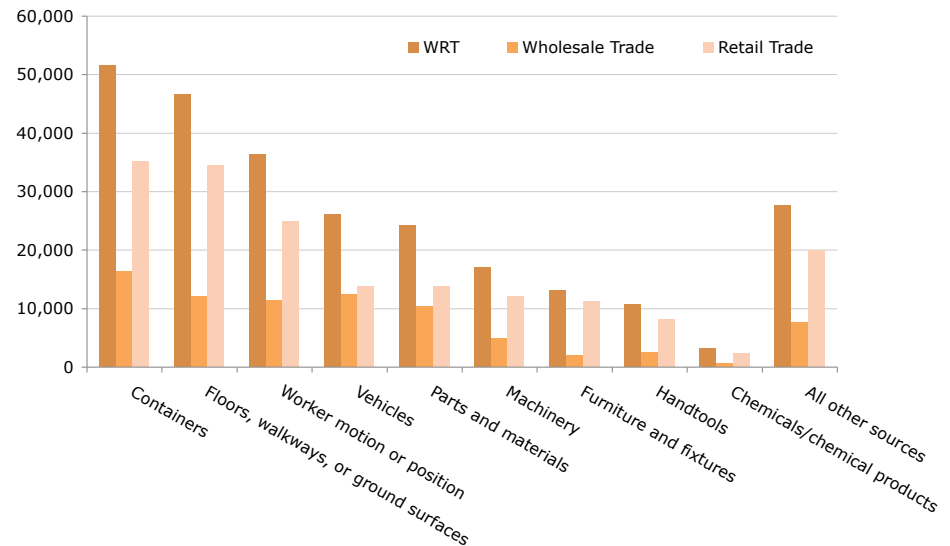


Figure 3.13. Numbers and rates (per 10,000 workers) of nonfatal injury/illness cases by source of injury, wholesale trade sector, 2005.

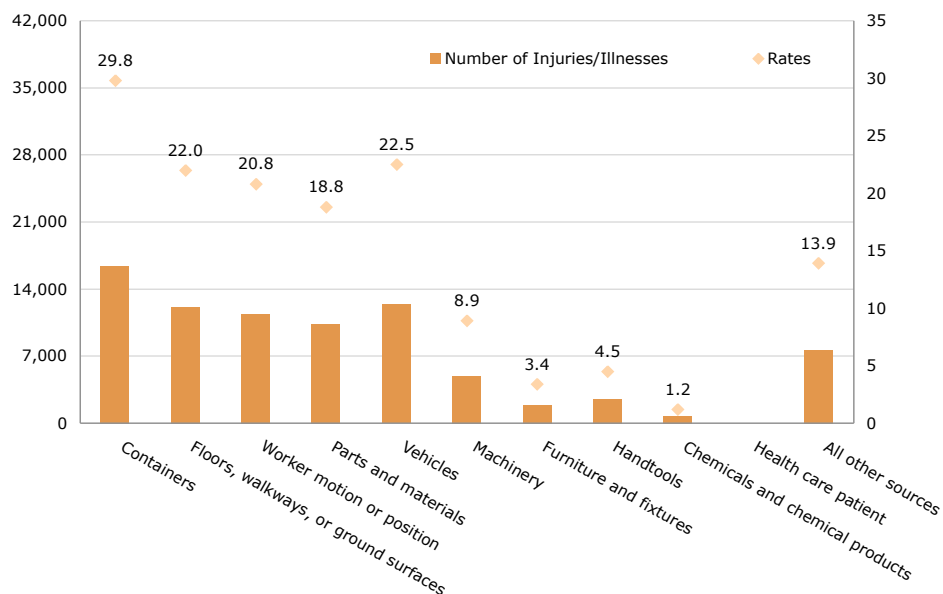
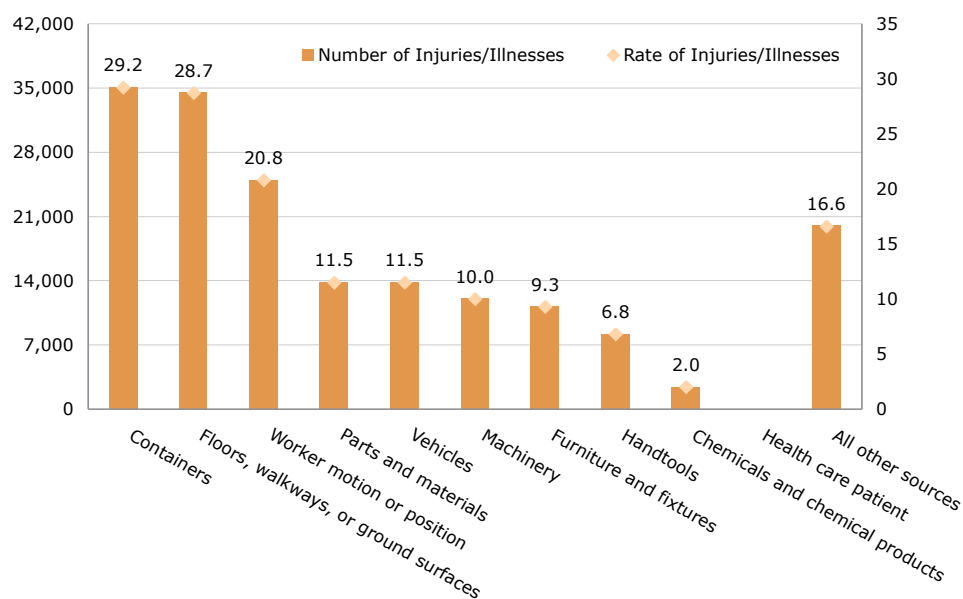


Figure 3.14. Numbers and rates (per 10,000 workers) of nonfatal injury/illness cases by source of injury, retail trade sector, 2005.



Numbers and Rates of Injuries/Illnesses by Source of Injury/Illness in Wholesale Trade and Retail Trade

(Figures 3.13 and 3.14)

Wholesale Trade

In wholesale trade, five source of injury/illness categories represented a top tier of injury/illness concerns in 2005. As previously mentioned, Containers was the leading source of injury/illness in both wholesale trade and retail trade, accounting for more than 51,000 reported injuries/illnesses that resulted in days away from work and a rate of nearly 30 injury/illness cases per 10,000 workers. Other source of injury/illness categories causing higher numbers and rates of nonfatal injuries/illnesses in wholesale trade included vehicles (12,350 injuries/illnesses; and a rate of 22.5/10,000 workers); floors, walkways, or ground surfaces (12,090; 22.0); worker motion or position (11,410; 20.8); and parts and materials (10,330; 18.8).

Retail Trade

In retail trade, although vehicles and parts and materials account for slightly more injuries/illnesses than in wholesale trade, the rates for these sources of injury/illness were substantially lower in retail trade as a result of the much larger working population. On the other hand, the retail trade sector had higher rates for floors, walkways, or ground surfaces as a source of injury/illness, which is consistent with the higher number and rate of fall-to-same-level injuries/illnesses (see Figures 3.5 and 3.6).

Rates and Numbers of Injuries/Illnesses by Body Part Injured in Private Industry, Wholesale Trade, and Retail Trade *(Figures 3.15 and 3.16)*

Trunk injuries (including back injuries), followed by injuries to the upper extremities and lower extremities, were the most commonly injured parts of the body in 2005 in WRT and in private industry overall. Wholesale trade and retail trade both had higher rates of DAWs resulting from trunk and lower extremity injuries. Retail trade also had higher rates of DAWs resulting from upper extremity injuries than wholesale trade or private industry. Injuries to the upper and lower extremities, when added together, accounted for more than 110,000 injuries.

Figure 3.15. Incidence rates (per 10,000 workers) for nonfatal occupational injuries/illnesses involving days away from work by body part injured, U.S. private industry, wholesale trade, and retail trade, 2005.

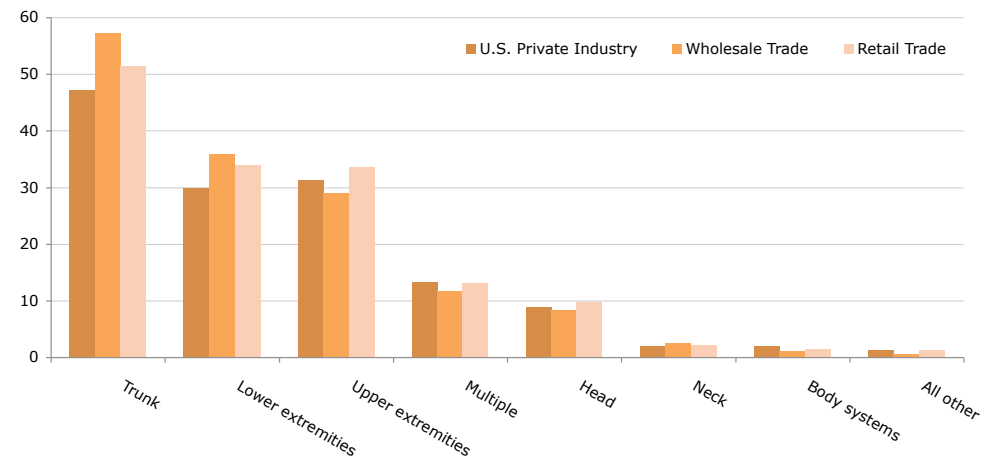


Figure 3.16. Numbers of nonfatal occupational injuries/illnesses involving days away from work by body part injured, U.S. private industry, wholesale trade, and retail trade, 2005.

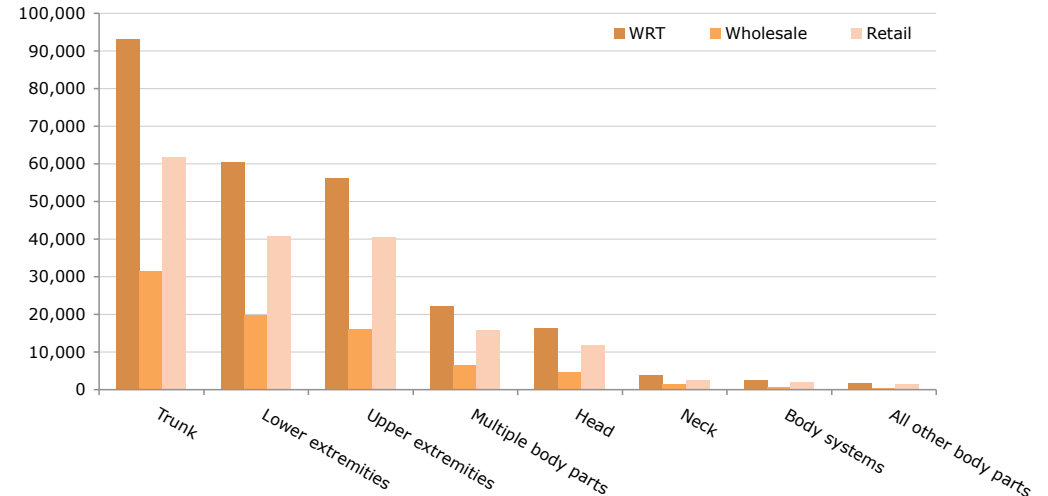
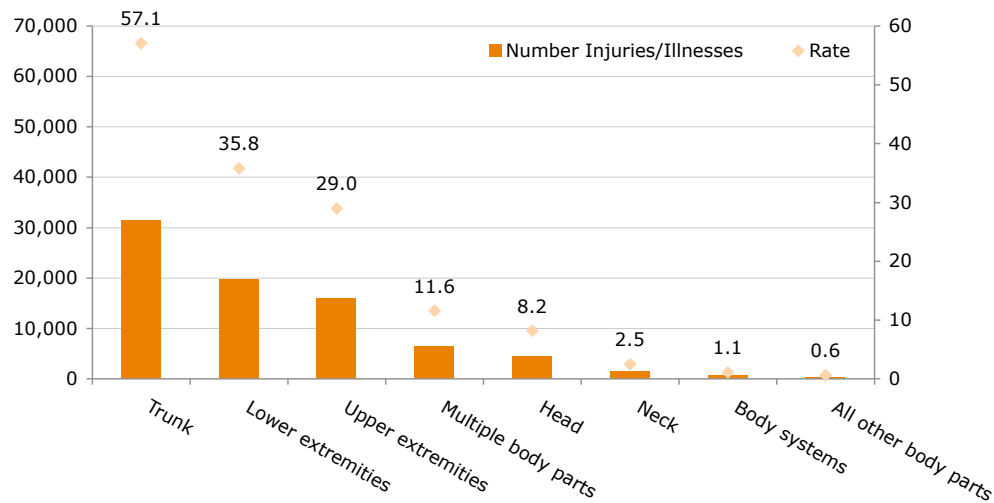


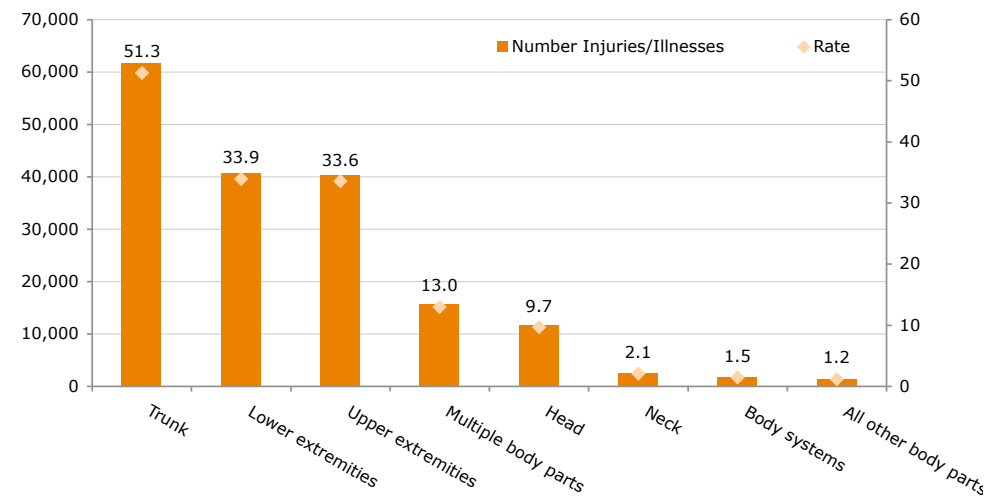
Figure 3.17. Numbers and rates (per 10,000 workers) of nonfatal occupational injuries/illnesses involving days away from work by selected body parts injured, wholesale trade, 2005.



Numbers and Rates of Nonfatal Injuries/Illnesses by Selected Body Part Categories in Wholesale Trade and Retail Trade *(Figures 3.17 and 3.18)*

The prevalence of sprain/strain injuries noted earlier (see Figures 3.7–3.10) coupled with the high numbers and rates of trunk and extremity injuries is consistent with the WRT sector's focus on moving and storing products. Manual and mechanical methods of handling products both produce inherent risks of acute traumatic injuries and musculoskeletal disorders related to overexertion, repeated trauma, and awkward body positions and movement during product-handling tasks.

Figure 3.18. Numbers and rates (per 10,000 workers) for nonfatal occupational injuries/illnesses involving days away from work by selected body parts injured, retail trade, 2005.



Nonfatal Injuries/Illnesses by Gender in Wholesale Trade, Retail Trade and U.S. Private Industry

(Figures 3.19 and 3.20)

As noted in Chapter 1, male and female workers in retail trade are nearly equally distributed. But, about 70% of workers in wholesale trade are male. (Figure 1.7). Not surprisingly, the injuries and illnesses by gender for the period 2003–2005 reflect this difference in gender distribution. Males experienced from 85%–88% of the nonfatal injuries/illnesses resulting in DAW in wholesale trade and about 60% in retail trade within the same time frame.

In private industry overall, males experienced about 65%–66% of injuries/illnesses. If data from wholesale and retail are combined, the resultant distribution of injuries/illnesses experienced by males ranges from about 67%–69%, a figure that more closely lines up with the private industry distribution.

Two additional findings of note are that (1) males are overrepresented among injury/illness cases in both wholesale and retail trade, as they are in private industry in general and (2) injuries/illnesses for both males and females in private industry and retail trade appear to trend downward from 2003–2005; whereas, in wholesale trade, no trend is apparent.

Figure 3.19. Numbers of nonfatal injury/illness cases involving days away from work by gender, wholesale and retail trade, 2003–2005.

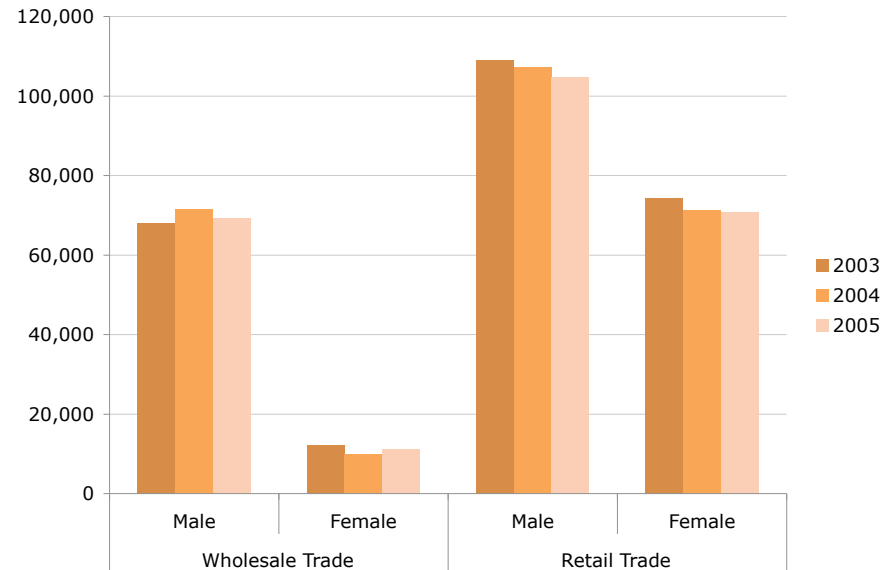


Figure 3.20. Numbers of nonfatal injury/illness cases involving days away from work by gender, U.S. private industry, 2003–2005.

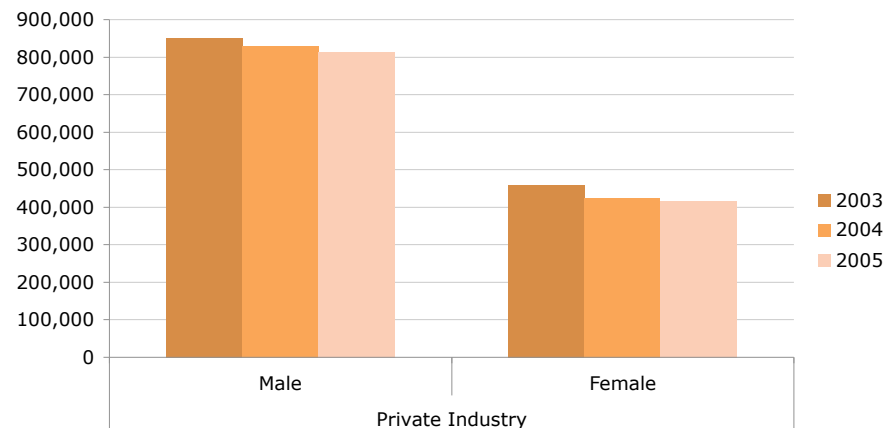
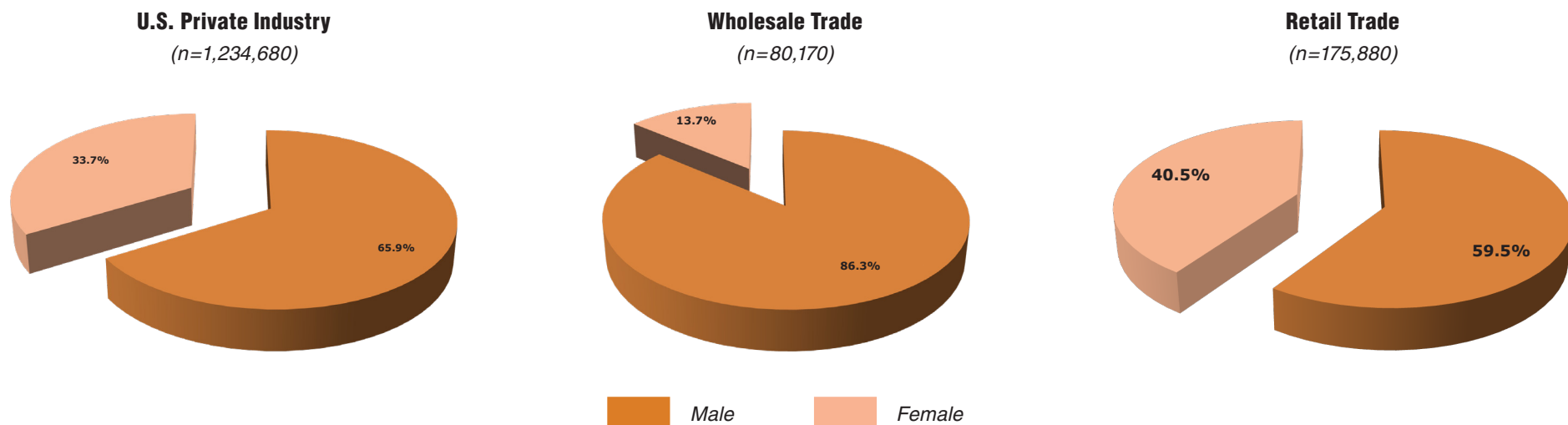


Figure 3.21. Distribution of nonfatal injury/illness cases involving days away from work by gender, U.S. private industry, wholesale trade, and retail trade, 2005.



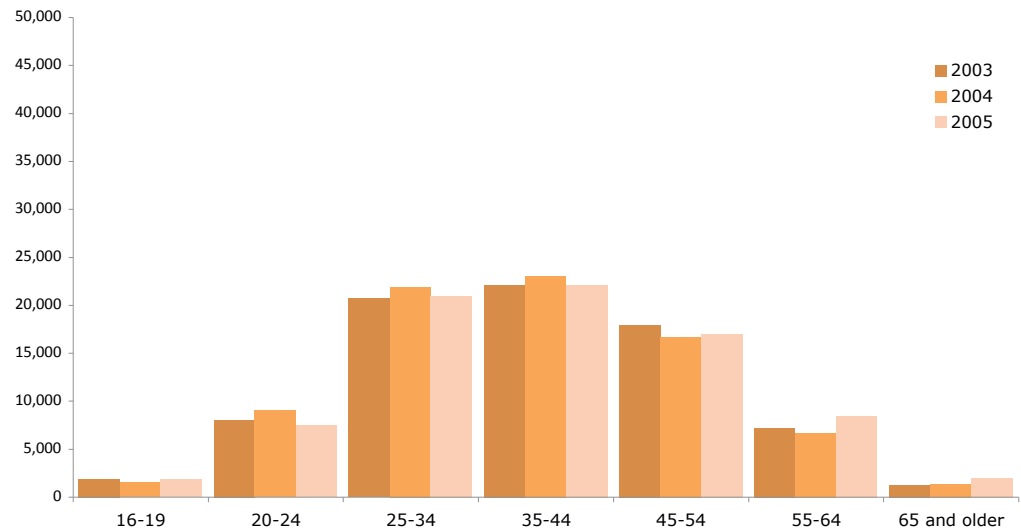
Gender Distribution of Nonfatal Injuries/Illnesses Involving Days Away from Work in U.S. Private Industry, Wholesale Trade, and Retail Trade (Figure 3.21)

Figure 3.21 is comparable with Figure 2.8 in Chapter 2 of this Chartbook. Figure 2.8 shows the distribution of fatal injuries by gender for the two major sectors within WRT and private industry. The distribution of nonfatal injuries/illnesses by gender is similar to the distribution of fatal injuries by gender when differences are noted between wholesale, retail, and overall private sector populations. However, the nonfatal injury/illness by gender experience is much different when the relative proportion of females is considered. Female workers experience a much larger share of nonfatal injuries/illnesses than of fatal injuries. As seen above (for the year 2005), females experienced between about 14%–40% of nonfatal injuries/illnesses with DAW. On the other hand, female workers experienced only 4%–14% of the fatal injuries experienced in 2005 within WRT and the overall private sector.

Nonfatal Injuries/Illnesses by Age in Wholesale Trade *(Figure 3.22)*

As with the distribution of injuries/illnesses by gender, the distribution by age group reflects differences (noted in Chapter 1, Figure 1.5) in the distribution of the workforce by age between wholesale trade and retail trade. The distribution of workers by age in wholesale trade, as well as the distribution of nonfatal injury/illness by age, are similar to the distributions seen in private industry overall. Wholesale trade has proportionately fewer younger and older workers than retail trade, and proportionately fewer nonfatal injuries and illnesses among younger and older workers, as well.

Figure 3.22. Numbers of nonfatal injury/illness cases involving days away from work by age, wholesale trade, 2003–2005.



Nonfatal Injuries/Illnesses by Age in Retail Trade *(Figure 3.23)*

The nonfatal injuries/illnesses experienced in the retail trade sector are somewhat more evenly distributed across age groups than those in wholesale trade. The only potential trend that might be noted in Figures 3.22 and 3.23 is that injuries/illnesses appear to be decreasing slightly in the age groups representing workers 20–44 years of age, while increasing slightly for the 16–19-year-olds and groups age 55 and older. The effect is a more evenly distributed injury/illness pattern across age groups.

Figure 3.23. Numbers of nonfatal injury/illness cases involving days away from work by age, retail trade, 2003–2005.

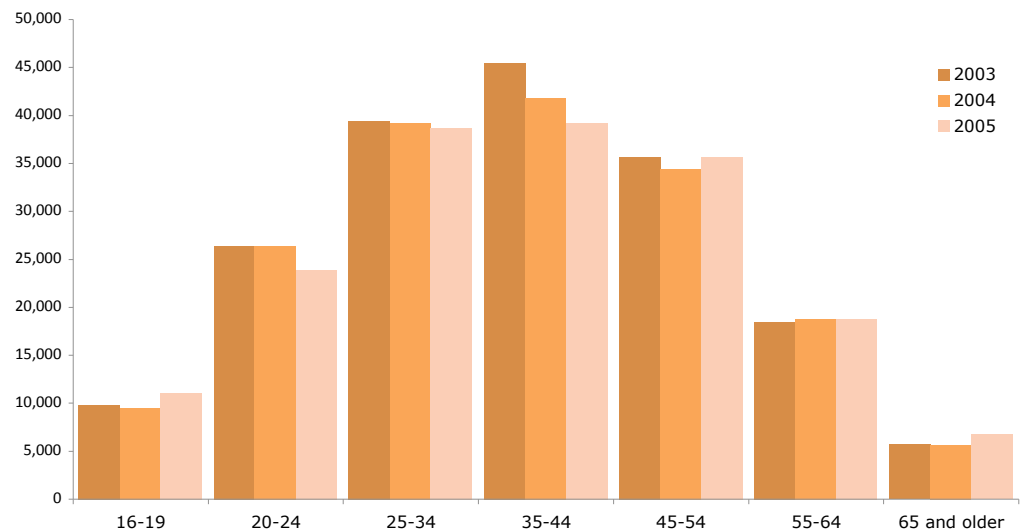


Figure 3.24. Percentage of nonfatal injury/illness cases involving days away from work by age, U.S. private industry, wholesale trade, and retail trade, 2005.

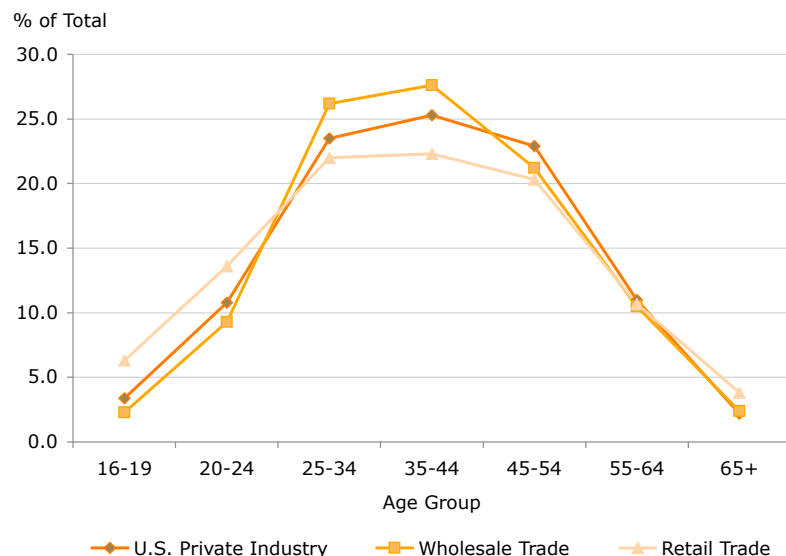
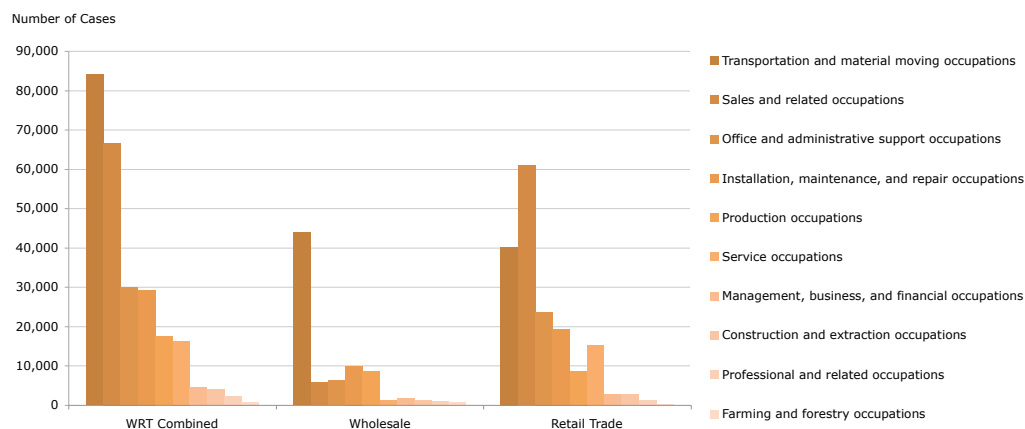


Figure 3.25. Nonfatal injury/illness cases by summary occupational groups, wholesale and retail trade combined, and wholesale trade and retail trade individually, 2005.



Nonfatal Injuries/Illnesses by Age in U.S. Private Industry, Wholesale Trade, and Retail Trade, 2005

(Figure 3.24)

In 2005 workers younger than 25 represented 11.6% of all nonfatal injuries/illnesses in wholesale trade and nearly 20% in retail trade. Workers age 25–54 years suffered 75% of the nonfatal injuries/illnesses in wholesale trade, but just 64.6% in retail. The distribution of injuries/illnesses by age in the private industry was more closely aligned with the wholesale trade sector. For example, the percentage of nonfatal injury/illness cases involving workers younger than 25 years of age was 14.2%.

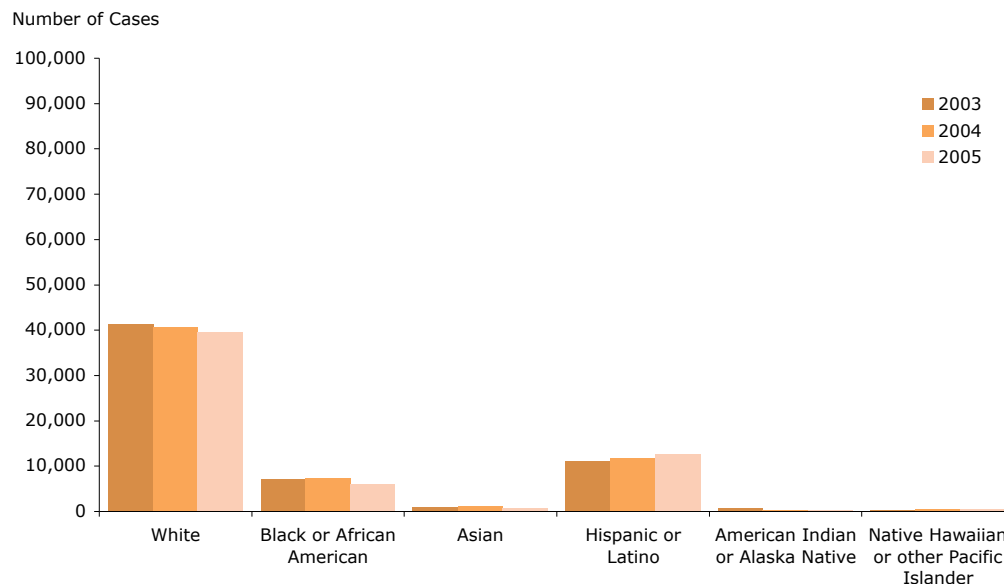
Nonfatal Injuries/Illnesses by Occupational Groups in Wholesale and Retail Trade and Wholesale Trade and Retail Trade (Figure 3.25)

A large proportion of the nonfatal injuries/illnesses experienced in retail trade involved sales and related occupations and transportation and material moving occupations. In wholesale, the transportation and material moving occupations suffered the majority of the injuries/illnesses. In WRT combined, transportation and material moving workers had the most injuries, followed by sales and related occupations. Other occupational groups that incurred injuries/illnesses in WRT include office and administrative support; installation, maintenance, repair; production; and service.

Nonfatal Injuries/Illnesses by Race/Ethnicity in Wholesale Trade *(Figure 3.26)*

In 2005 66.6% of the nonfatal occupational injuries/illnesses resulting in DAW were suffered by white workers. Hispanic or Latino workers accounted for 21.3% of the nonfatal injuries/illnesses, and blacks or African Americans incurred 10.0%. Asians, American Indians or Alaska Natives, and Native Hawaiian or other Pacific Islanders all represented 1% or less of the toll. The only potential trends evident in the 2003–2005 data indicate a decrease in the number of injuries/illnesses incurred by white workers, and an increase in the number of injuries/illnesses incurred by Hispanic or Latino workers.

Figure 3.26. Numbers of nonfatal injury/illness cases involving days away from work by race/ethnicity, wholesale trade, 2003–2005.



Nonfatal Injuries/Illnesses by Race/Ethnicity in Retail Trade *(Figure 3.27)*

In retail trade in 2005, 75.8% of all nonfatal occupational injuries/illnesses resulting in DAW were suffered by white workers, and Hispanic or Latino and black or African American workers accounted for 12.6% and 9.6% of all such injuries/illnesses, respectively. Trends indicate an overall decline in nonfatal injuries/illnesses involving DAW in retail trade.

Figure 3.27. Numbers of nonfatal injury/illness cases involving days away from work by race/ethnicity, retail trade, 2003–2005.

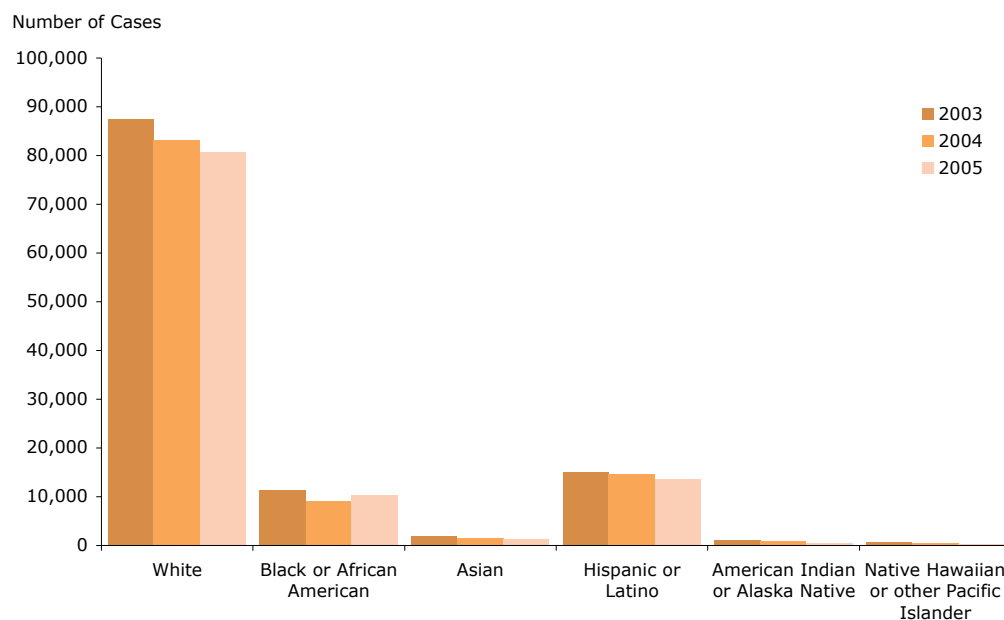


Figure 3.28. Numbers of nonfatal injury/illness cases involving days away from work by state, wholesale trade, 2005.

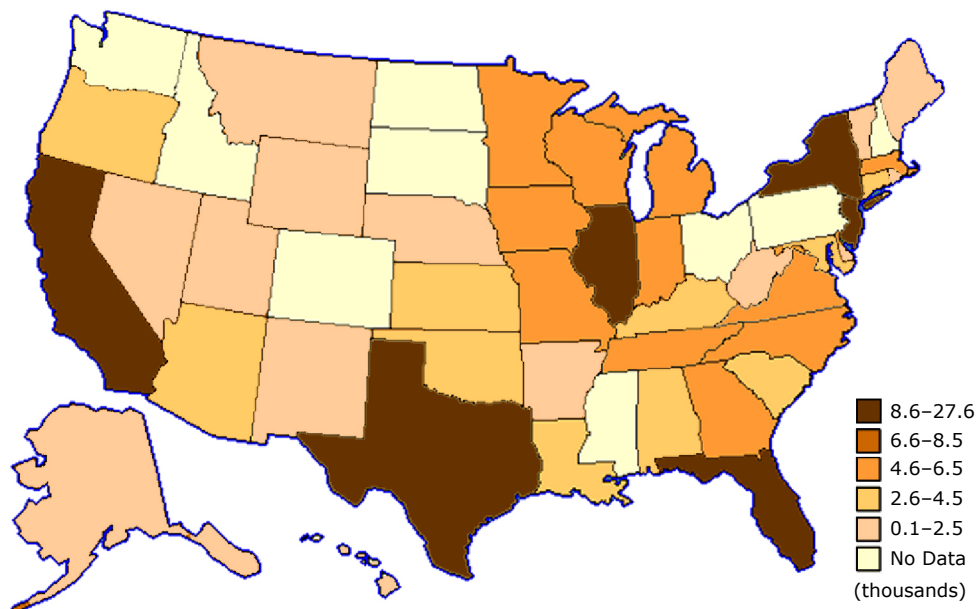
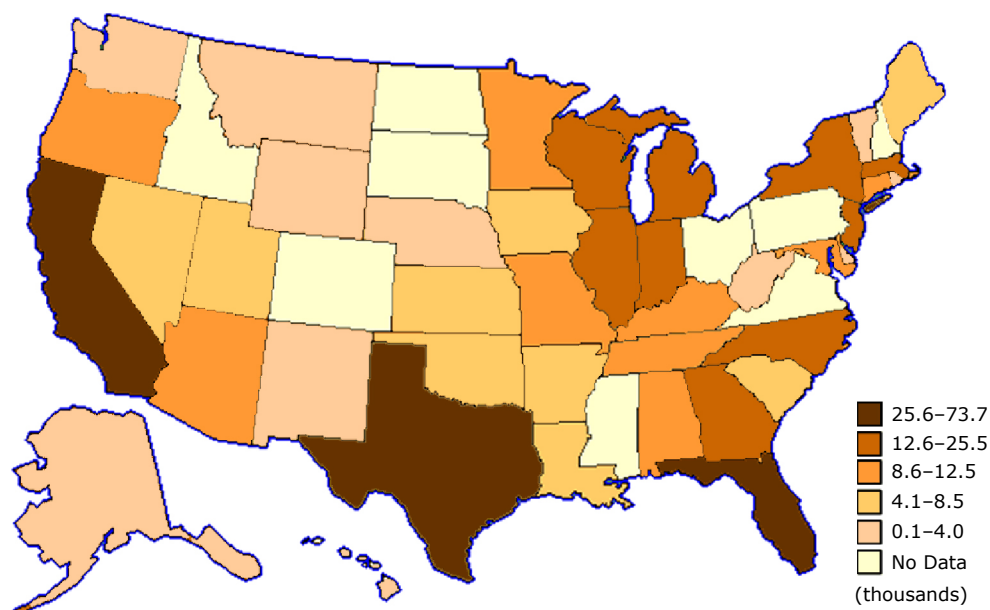


Figure 3.29. Numbers of nonfatal injury/illness cases involving days away from work by state, retail trade, 2005.



Numbers of Nonfatal Injuries/Illnesses by State in Wholesale Trade *(Figure 3.28)*

California reported the highest number of nonfatal injuries/illnesses in wholesale trade in 2005 (27,600), followed by Texas (17,500), Florida (13,200), Illinois (11,400), New Jersey (9,800), and New York (9,800). Among the states for which data were provided, Alaska (400 cases), Delaware (400), Vermont (600), Wyoming (600), Hawaii (800), Montana (900), and Rhode Island (900) reported the fewest number of wholesale trade injuries/illnesses.

Numbers of Nonfatal Injuries/Illnesses by State in Retail Trade *(Figure 3.29)*

The states with the highest numbers of nonfatal injury/illness cases in retail trade in 2005 were California (73,700), Florida (48,800), and Texas (40,500). Among the next tier of states with high numbers of nonfatal injuries/illnesses were New York (25,400) and Illinois (22,500). Among the states for which data were provided, those reporting the fewest injuries/illnesses were Washington (100), District of Columbia (400), Wyoming (1,200), Alaska (1,700), and Vermont (1,900).

Rates of Nonfatal Injuries/Illnesses by State in Wholesale Trade *(Figure 3.30)*

High rates for the wholesale trade sector were found in Maine (7.8), Wyoming (7.3), Iowa (7.2), Wisconsin (7.1), and Vermont (6.8). Lower rates were experienced in Alabama (2.3), New York (3.0), Delaware (3.1), Louisiana (3.7), North Carolina (3.8), and Texas (3.8).

Rates of Nonfatal Injuries/Illnesses by State in Retail Trade *(Figure 3.31)*

The states with the highest rates of nonfatal injuries/illnesses in retail trade in 2005 were Maine (7.3) and Rhode Island (6.9), followed by Connecticut, Montana, Utah, and Vermont (all with rates of 5.9).

The lowest rate where data were available was found in Washington (1.4). Other lower rate states were New York (3.9) and Texas (4.3), as well as Nebraska, New Jersey, and Tennessee (all 4.4).

Figure 3.30. Rates (per 10,000 workers) of nonfatal injury/illness cases involving days away from work by state, wholesale trade, 2005.

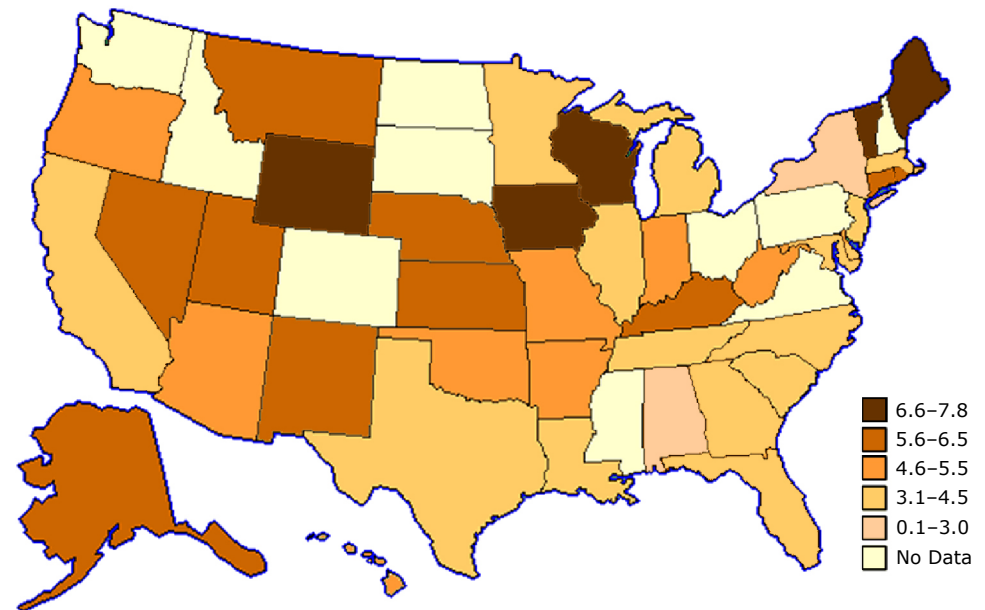
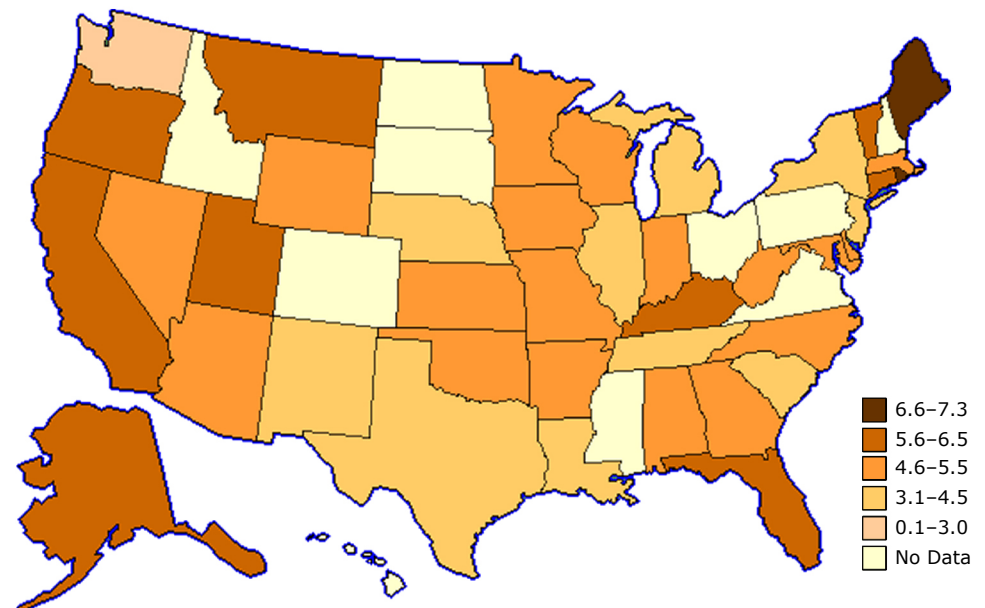


Figure 3.31. Rates (per 10,000 workers) of nonfatal injury/illness cases involving days away from work by state, retail trade, 2005.



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work by industry and race or ethnic origin of worker, 2005. www.bls.gov/iif/oshwc/osh/case/ostb1694.pdf. Last accessed, February 25, 2009. (*Figure 3.26, Figure 3.27*)

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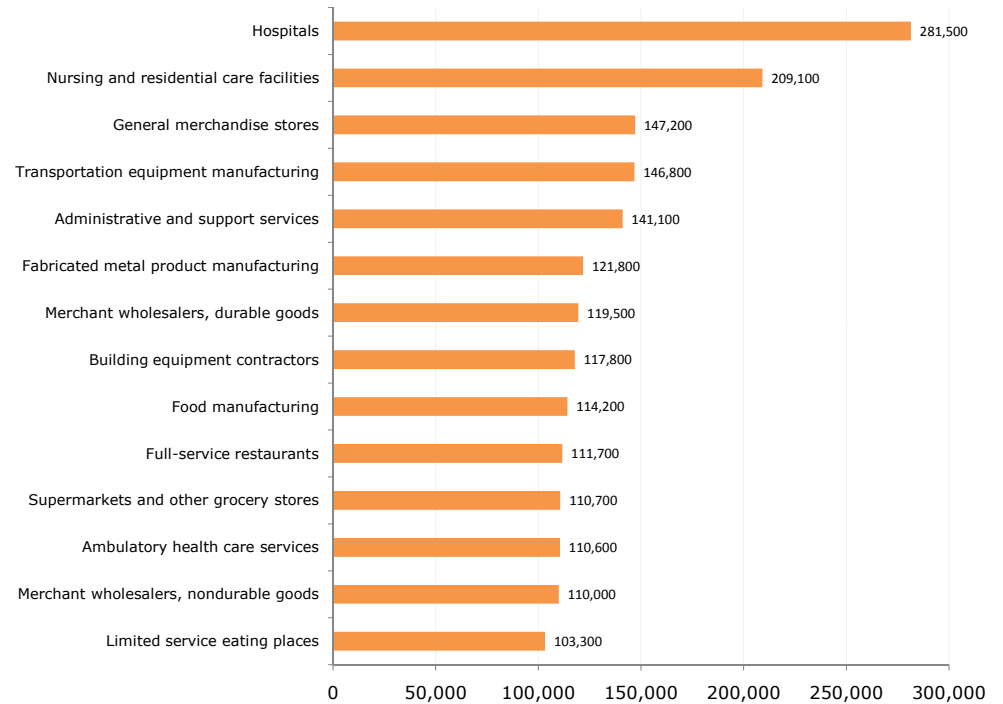
Chapter 4

High-Risk Subsectors in Wholesale & Retail Trade

Introduction

The WRT sector is made up of 146 distinct types of business, as categorized in the NAICS. Of these, 71 are wholesale businesses and 75 are retail businesses. When the occupational injury, illness, and fatality data are compiled for the overall WRT sector, the resulting counts and rates, though useful for making general comparisons between major industry sectors (2-digit NAICS), mask the reality that certain types of business (subsectors) exhibit much higher counts and rates than others. The purpose of this chapter is to examine data specific to the subsectors within WRT in order to (1) identify subsectors that experience higher rates and counts of occupational injuries, illnesses, and fatalities and (2) examine characteristics of the workforce and the injury, illness, and fatality outcomes for higher-risk subsectors. Such examination may identify factors that appear to contribute to risk and cause in the high-risk subsectors, which, in turn, may suggest prevention opportunities. BLS has identified certain WRT subsectors as the leading industry sectors among all U.S. industries for injury/illness counts (see Figure 4.1), and injury/illness rates (see Table 4.1).

Figure 4.1. Industry subsectors with more than 100,000 nonfatal injuries/illnesses, 2005.



High Nonfatal Injury/Illness Counts in U.S. Private Industry

(Figure 4.1)

Of the 14 U.S. industries with at least 100,000 nonfatal occupational injuries and illnesses in 2005, 4 are WRT subsectors—general merchandise stores (NAICS 452), merchant wholesalers, durable goods (NAICS 423), supermarkets and other grocery stores (NAICS 44511), and merchant wholesalers, nondurable goods (NAICS 424).

Table 4.1. Industry subsectors with highest injury/illness case rates (per 10,000 workers) with days away from work, 2005.

Industry	NAICS Code	Annual Average Employment	2004	2005
Beet sugar manufacturing	311313	6,300	–	13.2
Light truck and utility vehicle manufacturing	336112	72,600	10.4	10.4
Animal (except poultry) slaughtering	311611	148,400	8.4	8.8
Flat glass manufacturing	327211	13,100	5.0	8.6
Couriers	4921	512,900	9.2	8.6
Prefabricated wood building manufacturing	321992	26,700	6.8	8.3
Truss manufacturing	321214	49,300	6.9	8.0
Scheduled air transportation	4811	460,900	8.0	8.0
Hog and pig farming	1122	17,100	10.6	7.7
Framing contractors	23813	168,100	6.3	7.7
Heavy duty truck manufacturing	33612	37,900	–	7.7
Iron foundries	331511	61,200	8.3	7.5
Amusement parks and arcades	7131	153,900	10.1	7.5
Rooming and boarding houses	7213	10,800	0.4	7.5
Soft drink manufacturing	312111	77,000	7.9	7.3
Clay refractory manufacturing	327124	5,700	–	7.3
Truck trailer manufacturing	336212	35,700	5.8	7.2
Fluid milk manufacturing	311511	54,900	6.7	7.0
Cheese manufacturing	311513	37,800	5.5	7.0
Bottled water manufacturing	312112	15,500	9.0	6.9
Iron and steel forging	332111	25,800	5.2	6.8
Overhead traveling crane, hoist, and monorail system manufacturing	333923	13,900	–	6.8
Manufactured home (mobile home) manufacturing	321991	46,500	6.7	6.7
Boat building	336612	60,600	5.9	6.6
Beer, wine, and distilled alcoholic beverage merchant wholesalers	4248	144,300	7.0	6.6
All Private industry		109,127,000	2.5	2.4

Table 4.2. Nonfatal occupational injury/illness rates (per 10,000 workers) by 4-digit NAICS subsectors, wholesale trade, 2005.

Wholesale Trade Subsector (4-digit NAICS)	NAICS	Population	Incidence Rate	Number of Cases
Beer, wine, and distilled alcoholic beverage	4248	144,300	9.6	13,400
Grocery and related product	4244	692,800	7.7	53,000
Metal and mineral (except petroleum)	4235	122,600	7.5	9,300
Lumber and other construction materials	4233	250,900	6.8	17,000
Farm product raw material	4245	72,900	6.1	3,700
Motor vehicle and motor vehicle parts and supplies	4231	342,200	6.0	19,100
Machinery, equipment, and supplies	4238	657,300	4.3	28,000
Miscellaneous nondurable goods	4249	359,200	4.3	14,100
Hardware, and plumbing and heating equipment and supplies	4237	241,500	4.1	9,700
Petroleum and petroleum products	4247	100,500	4.1	4,100
Furniture and home furnishing	4232	112,300	3.9	4,200
Paper and paper product	4241	151,500	3.9	5,300
Miscellaneous durable goods	4239	277,900	3.7	9,800
Apparel, piece goods, and notions	4243	145,700	3.6	4,800
Chemical and allied products	4246	130,000	3.1	4,000
Wholesale electronic markets and agents and brokers	4251	731,300	2.5	16,600
Drugs and druggists' sundries	4242	215,600	2.3	4,700
Electrical goods	4236	340,100	2.2	7,200
Professional and commercial equipment and supplies	4234	636,200	1.9	11,900

High Nonfatal Injury/Illness Rates in U.S. Private Industry *(Table 4.1)*

In a BLS ranking of U.S. industry sectors by rates of injury/illness cases that involve days away from work, the wholesale subsector beer, wine, and distilled alcoholic beverage merchant wholesalers (NAICS 4248) is included along with traditionally high-risk manufacturing, construction, and farming sectors. The rate in this wholesale business in 2005 (6.6 injuries/illnesses per 10,000 workers) was more than 2.5 times the rate for all private industry (2.4).

Nonfatal Occupational Injury/Illness Rates in Wholesale Trade *(Table 4.2)*

Among all wholesale trade subsectors, the beer, wine, and distilled alcoholic beverage merchant wholesalers sector ranked first, with an overall injury/illness case rate of 9.6 injuries/illnesses per 10,000 workers, followed by grocery and related product (7.7), metal and mineral (except petroleum) (7.5), lumber and other construction materials (6.8), farm product raw material (6.1), and motor vehicle and motor vehicle parts and supplies (6.0).

Fatal Injury Counts in Wholesale Trade

(Tables 4.3 and 4.4)

Among wholesale trade subsectors, those with the highest number of fatal work injuries in 2005 included miscellaneous durable goods (NAICS 4239), with 29 worker deaths and, with 26 deaths each machinery, equipment and supplies (NAICS 4238) and grocery and related product (NAICS 4244). Other wholesale sectors that experienced more than 10 fatalities in 2005 were petroleum and petroleum products (NAICS 4247), motor vehicle and motor vehicle parts and supplies (NAICS 4231), farm product raw material (NAICS 4245), and professional and commercial equipment and supplies (NAICS 4234) with 19, 16, 14, and 12 deaths, respectively.

Often, a high count or rate attributed at the 4-digit NAICS level results from a high count or rate at the 5- or 6-digit NAICS level. For example, of the 29 fatal work injuries incurred in the miscellaneous durable goods sector, 20 happened in wholesale companies that sell recyclable material (NAICS 42393). Similarly, most of the work injury deaths experienced by farm product raw material wholesalers, occurred in companies dealing with grain and field bean (NAICS 42451) produce.

Table 4.3. Fatalities by 4-digit NAICS subsectors, wholesale trade, 2005.

Wholesale Trade Subsector (4-digit NAICS)	NAICS Code	Total Fatalities
Miscellaneous durable goods	4239	29
Machinery, equipment, and supplies	4238	26
Grocery and related product	4244	26
Petroleum and petroleum products	4247	19
Motor vehicle and motor vehicle parts and supplies	4231	16
Farm product raw material	4245	14
Professional and commercial equipment and supplies	4234	12
Lumber and other construction materials	4233	9
Chemical and allied products	4246	8
Metal and mineral (except petroleum)	4235	6
Drugs and druggists' sundries	4242	5
Furniture and home furnishing	4232	4
Electrical goods	4236	3
Hardware, and plumbing and heating equipment and supplies	4237	3
Paper and paper product merchant wholesalers	4241	3
Apparel, piece goods, and notions	4243	3

Table 4.4. Fatalities by 5-digit NAICS subsectors, wholesale trade, 2005.

Wholesale Trade Subsector (5-digit NAICS)	NAICS Code	Total Fatalities
Recyclable material	42393	20
Industrial machinery and equipment	42383	11
Grain and field bean	42451	11
Motor vehicle parts (used)	42314	10
General line grocery	42441	8
Metal service centers and offices	42351	6
Fresh fruit and vegetable	42448	6
Other grocery and related products	42449	6
Other chemical and allied products	42469	6
Medical, dental, and hospital equipment and supplies	42345	5
Construction and mining (except oil well) machinery, equipment	42381	5
Drugs and druggists' sundries	42421	5
Petroleum bulk stations and terminals	42471	5
Automobile and other motor vehicle	42311	4
Farm and garden machinery and equipment	42382	4
Sporting and recreational goods and supplies	42391	4
Furniture	42321	3
Lumber, plywood, millwork, and wood panel	42331	3
Brick, stone, and related construction material	42332	3
Roofing, siding, and insulation material	42333	3
Electrical apparatus/equipment, wiring supplies, construction material	42361	3
Service establishment equipment and supplies	42385	3

Table 4.5. Nonfatal occupational injury/illness rates (per 10,000 workers) by 5-digit NAICS subsectors, retail trade, 2005.

Retail Trade Subsector (5-digit NAICS)	NAICS	Population	Incidence Rate	Number of Cases
Home centers	44411	622,600	9.2	54,200
Warehouse clubs and superstores	45291	984,000	7.3	58,800
Other building material dealers	44419	291,900	7.0	19,900
Tire dealers	44132	162,000	6.6	10,400
Supermarkets and other grocery (except convenience) stores	44511	2,290,500	6.4	108,200
Hobby, toy, and game stores	45112	137,000	6.4	5,400
All other general merchandise stores	45299	323,600	5.8	14,100
Fuel dealers	45431	94,800	5.6	4,900
Other direct selling establishments	45439	50,300	5.5	2,200
Pet and pet supplies stores	45391	87,700	5.2	3,300
Other home furnishings stores	44229	175,000	5.1	6,300
Recreational vehicle dealers	44121	41,000	5.0	1,900
New car dealers	44111	1,135,700	4.9	53,800
Hardware stores	44413	164,000	4.5	5,700
Floor covering stores	44221	101,100	4.4	4,000
Nursery and garden centers	44422	114,000	4.4	4,200
Other specialty food stores	44529	132,200	4.4	4,500
Paint and wallpaper stores	44412	41,100	4.2	1,500
Family clothing stores	44814	496,400	4.2	13,700
Office supplies and stationery stores	45321	178,300	4.2	5,800
Automotive parts and accessories stores	44131	326,100	4.1	12,100
Motorcycle, boat, and other motor vehicle dealers	44122	124,700	3.6	4,000
Meat markets	44521	49,800	3.6	1,400
Gasoline stations with convenience stores	44711	745,600	3.5	21,300
Sewing, needlework, and piece goods stores	45113	55,300	3.4	1,100
Fruit and vegetable markets	44523	44,000	3.0	1,200
All other miscellaneous store retailers	45399	159,800	3.0	3,700
Other gasoline stations	44719	120,900	2.9	3,000
Sporting goods stores	45111	217,600	2.9	4,400
Appliance, television, and other electronics stores	44311	364,700	2.8	8,400
Manufactured (mobile) home dealers	45393	25,800	2.7	600
Gift, novelty, and souvenir stores	45322	217,900	2.6	3,400
Pharmacies and drug stores	44611	690,400	2.5	13,300
Used car dealers	44112	122,400	2.4	2,700
Other health and personal care stores	44619	93,500	2.4	1,800
Women's clothing stores	44812	261,900	2.4	3,700
Outdoor power equipment stores	44421	32,300	2.3	700
Book stores and news dealers	45121	153,600	2.1	2,200
Cosmetics, beauty supplies, and perfume stores	44612	97,800	1.7	1,100
Clothing accessories stores	44815	43,200	1.7	500
Musical instrument and supplies stores	45114	35,400	1.7	400
Computer and software stores	44312	148,500	1.6	2,100
Camera and photographic supplies stores	44313	17,800	1.3	200
Men's clothing stores	44811	76,000	1.0	500
Other clothing stores	44819	118,300	1.0	800
Prerecorded tape, compact disc, and record stores	45122	50,200	1.0	300
Optical goods stores	44613	63,900	0.9	500
Art dealers	45392	23,900	0.8	100
Jewelry stores	44831	155,600	0.6	700

Nonfatal Occupational Injury/Illness Rates in Retail Trade *(Table 4.5)*

Among retail trade sectors, the highest injury/illness case rates are attributed to home centers with a rate of 9.2; warehouse clubs and superstores (7.3), other building material dealers (7.0), tire dealers (6.6), supermarkets and other grocery (except convenience) stores (6.4), and hobby, toy and game stores (6.4).

Fatal Injury Counts in Retail Trade

(Tables 4.6 and 4.7)

The highest count of work-related fatal injuries in 2005—84 deaths—occurred in the grocery stores subsector. These 84 deaths were nearly evenly split between convenience stores (46 deaths) and supermarkets and other grocery (except convenience) stores (38 deaths). Other 4-digit NAICS retail trade subsectors with high fatality counts included gasoline stations (58 deaths), automobile dealers (43 deaths), and building material and supplies dealers (39 deaths).

At the 5-digit NAICS level, the 46 deaths attributed to convenience stores, was the highest among retail subsectors. Interestingly, the second highest number of deaths in retail were found in gasoline stations with convenience stores, which accounted for 44 of the 58 deaths in the 4-digit gasoline stations subsector. Other retail subsectors exhibiting high counts of fatal injuries included supermarkets and other grocery (except convenience) stores (38 deaths), other building material dealers (19 deaths), new car dealers (17 deaths), used car dealers (15 deaths), other direct selling establishments (15 deaths), and home centers (13 deaths).

Table 4.6. Fatalities by 4-digit NAICS subsectors, retail trade, 2005.

Retail Trade Subsector	NAICS Code	Total Fatalities
Grocery stores	4451	84
Gasoline stations	4471	58
Automobile dealers	4411	43
Building material and supplies dealers	4441	39
Direct selling establishments	4543	21
Automotive parts, accessories, and tire stores	4413	20
Other miscellaneous store retailers	4539	15
Specialty food stores	4452	13
Other general merchandise stores	4529	11
Other motor vehicle dealers	4412	10
Beer, wine, and liquor stores	4453	9
Furniture stores	4421	8
Lawn and garden equipment and supplies stores	4442	8
Department stores	4521	8
Electronics and appliance stores	4431	7
Clothing stores	4481	7
Sporting goods, hobby, and musical instrument stores	4511	7
Jewelry, luggage, and leather goods stores	4483	5
Florists	4531	5
Office supplies, stationery, and gift stores	4532	4
Used merchandise stores	4533	4
Shoe stores	4482	3

Table 4.7. Fatalities by 5-digit NAICS subsectors, retail trade, 2005.

Retail Trade Subsector	NAICS Code	Total Fatalities
Convenience stores	44512	46
Gasoline stations with convenience stores	44711	44
Supermarkets and other grocery (except convenience) stores	44511	38
Other building material dealers	44419	19
New car dealers	44111	17
Used car dealers	44112	15
Other direct selling establishments	45439	15
Home centers	44411	13
All other miscellaneous store retailers	45399	11
Automotive parts and accessories stores	44131	10
Tire dealers	44132	10
Motorcycle, boat, and other motor vehicle dealers	44122	9
Beer, wine, and liquor stores	44531	9
Furniture stores	44211	8
Nursery and garden centers	44422	8
Other gasoline stations	44719	8
Department stores	45211	8
Appliance, television, and other electronics stores	44311	7
Sporting goods stores	45111	6
Warehouse clubs and superstores	45291	6
Fuel dealers	45431	6
Hardware stores	44413	5
Meat markets	44521	5
Jewelry stores	44831	5
All other general merchandise stores	45299	5
Florists	45311	5
Other specialty food stores	44529	4
Used merchandise stores	45331	4
Manufactured (mobile) home dealers	45393	4
Family clothing stores	44814	3
Shoe stores	44821	3
Gift, novelty, and souvenir stores	45322	3

Table 4.8. Fatalities from assaults and violent acts, U.S. private industry, 2005.

4- and 5-digit U.S. Private Industry Subsector	NAICS	Number of worker deaths (n=788)
Justice, public order, and safety activities (state and local government)	9221	66
Police protection	92212	58
Grocery stores	4451	48
Convenience stores	44512	36
Gasoline stations	4471	42
Gasoline stations with convenience stores	44711	36
Other gasoline stations (without convenience stores)	44719	3
Taxi and limousine service	4853	35
Taxi service	48531	33
Full service restaurants	7221	35
Full service restaurants	72211	35
Limited service eating places	7222	35
Limited service restaurants	722211	30
Drinking places (alcoholic beverages)	7224	29
Cattle ranching and farming	1121	23
Automotive repair	8111	22
Lessors of real estate	5311	18
Investigation and security services	5616	15

Fatalities from Assault and Violent Acts in U.S. Private Sector *(Table 4.8)*

A high percentage of deaths in the convenience stores and gasoline stations with convenience stores subsectors resulted from assaults and violent acts. This high percentage points to a well-documented problem: violence (resulting in homicide) stemming from robberies in retail establishments, particularly convenience stores.

As shown in Chapter 2 of this Chartbook, occupational assaults and violent acts represent the leading cause of fatal work injury in the retail trade sector overall, resulting in 202 deaths, or slightly more than half of the 400 fatal work injuries in retail trade in 2005.

Table 4.8 shows that the total number of fatalities caused by assaults and violent acts for both convenience stores (NAICS 44512) and gasoline stations with convenience stores (NAICS 44711) is 72. That is 14 more fatal injuries than the number experienced by state and local police protection (NAICS 92212), and more than twice the number experienced by taxi service companies (NAICS 48531) and full-service restaurants (NAICS 72211).

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Fatal Injuries in High-Risk Wholesale Trade Subsectors

Miscellaneous durable goods (NAICS 4239)

Recyclable product (NAICS 42393)

Grocery and related product (NAICS 4244)

Petroleum and petroleum product (NAICS 4247)

Machinery, equipment, and supplies (NAICS 4238)

Fatal Injuries by Event/Exposure for Selected Wholesale Trade Subsectors *(Figures 4.2 through 4.6)*

In 2005 the leading event/exposure contributing to fatal injuries in the wholesale trade sector was transportation incidents (106 deaths). However, in miscellaneous durable goods, the 4-digit NAICS wholesale subsector that experienced the highest number of fatal injuries in 2005, there were an equal number of deaths resulting from transportation incidents and contact with objects and equipment (10 each). All 10 deaths attributed to contact with objects and equipment occurred in the recyclable material subsector (NAICS 42393).

For other selected wholesale subsectors with high fatal injury counts (grocery and related product-NAICS 4244; petroleum and petroleum products-NAICS 4247; and machinery, equipment and supplies-NAICS 4238), the leading contributing event/exposure was transportation incidents.

Figure 4.2. Fatal injuries by event/exposure, miscellaneous durable goods, NAICS 4239, 2005.

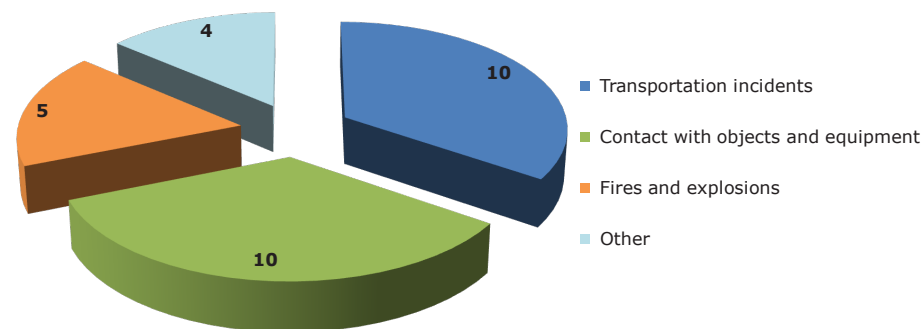


Figure 4.3. Fatal injuries by event/exposure, miscellaneous durable goods, recyclable material, NAICS 42393, 2005.

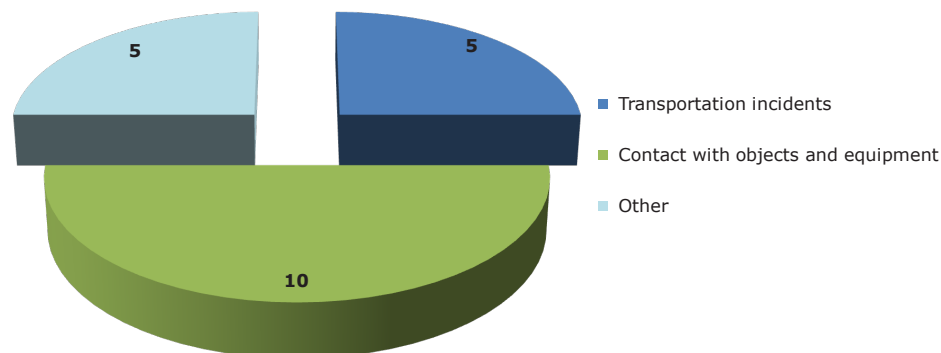


Figure 4.4. Fatal injuries by event/exposure, grocery and related product, NAICS 4244, 2005.

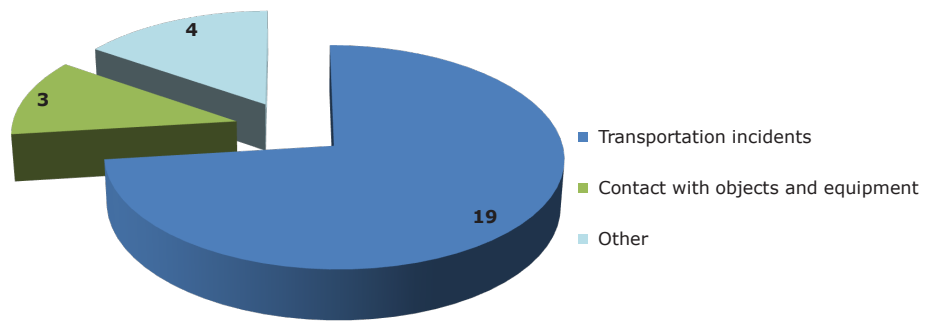


Figure 4.6. Fatal injuries by event/exposure, machinery, equipment and supplies, NAICS 4238, 2005.

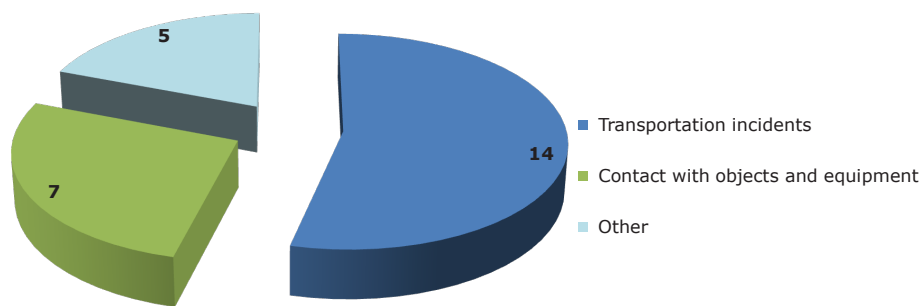
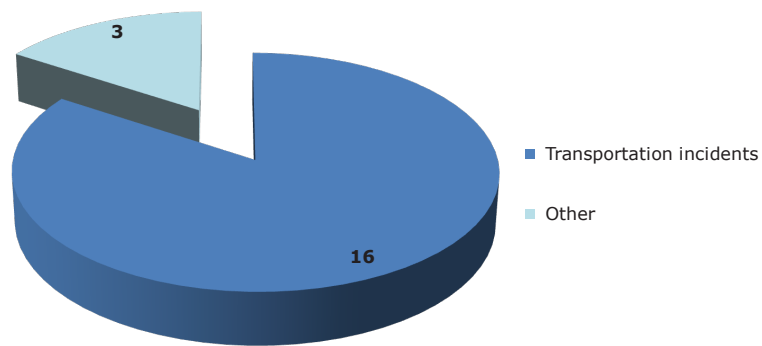


Figure 4.5. Fatal injuries by event/exposure, petroleum and petroleum products, NAICS 4247, 2005.



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Fatal Injuries in High-Risk Retail Trade Subsectors

Grocery stores (NAICS 4451)

Supermarkets and other grocery [except convenience] stores (NAICS 44511)

Convenience stores (NAICS 44512)

Gasoline stations (NAICS 4471)

Gasoline stations with convenience stores (NAICS 44711)

Building materials and supplies dealers (NAICS 4441)

Home centers (NAICS 44411)

Other building materials dealers (NAICS 44419)

Automobile dealers (NAICS 4411)

New car dealers (NAICS 44111)

Used car dealers (NAICS 44112)

Direct selling establishments (NAICS 4543)

Fatal Injuries by Event/Exposure for Selected Retail Trade Subsectors *(Figures 4.7 through 4.18)*

The leading contributing event/exposure to fatal injuries in retail was assaults and violent acts, which resulted in 202 deaths in 2005. These violence-related deaths were prevalent in grocery stores (NAICS 4451-64 deaths), particularly in convenience stores (NAICS 44512-44 deaths) and supermarkets and other grocery (except convenience) stores (NAICS 44511-20 deaths); and in gasoline stations (NAICS 4471-42 deaths), particularly in gasoline stations with convenience stores (NAICS 44711-35 deaths).

Other events/exposures contributing to a high number of deaths among retail workers were transportation incidents and contact with objects and equipment, both of which were more numerous than assaults and violent acts in building material and supply dealers (NAICS 4441).

Automobile dealers (NAICS 4411) experienced a nearly equal number of deaths from transportation incidents (16 deaths) and assaults and violent acts (15 deaths) in 2005, but a closer look at subsectors reveals that transportation incidents were the leading event/exposure associated with deaths among new car dealers (NAICS 44111), and assaults and violent acts led all events/exposures associated with deaths among used car dealers (NAICS 44112).

In direct selling establishments (NAICS 4543) and home centers (NAICS 44411), transportation incidents accounted for more deaths than any other event/exposure.

BLS data providing insight into circumstances leading to fatal injuries are more limited than data on nonfatal injuries. However, these breakouts by event/exposure provide one way to focus research and prevention resources.

Figure 4.7. Fatal injuries by event/exposure, grocery stores, NAICS 4451, 2005.

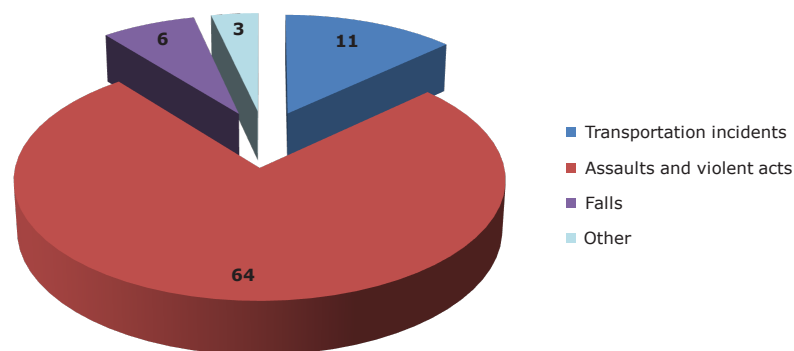


Figure 4.8. Fatal injuries by event/exposure, supermarkets and other grocery, NAICS 44511, 2005.

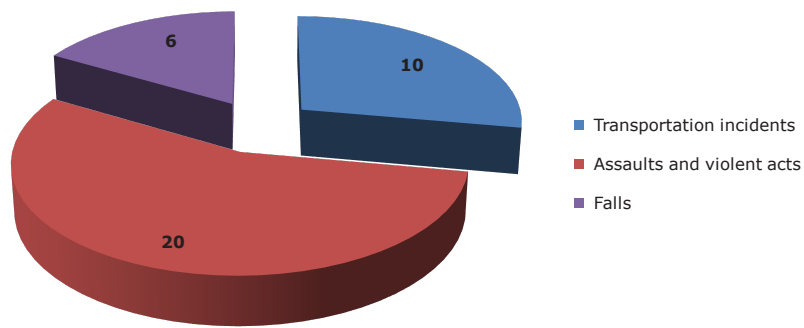


Figure 4.10. Fatal injuries by event/exposure, gasoline stations, NAICS 4471, 2005.

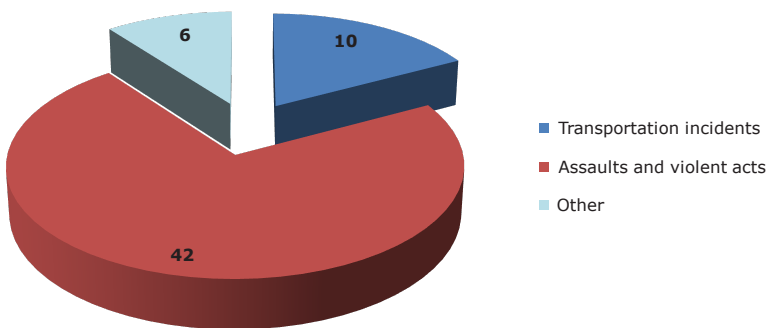


Figure 4.9. Fatal injuries by event/exposure, convenience stores, NAICS 44512, 2005.

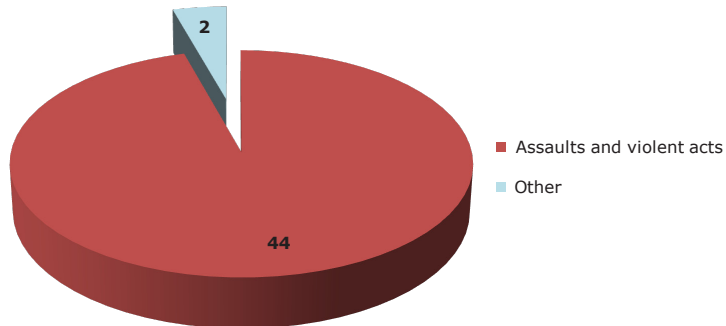


Figure 4.11. Fatal injuries by event/exposure, gasoline stations with convenience stores, NAICS 44711, 2005.

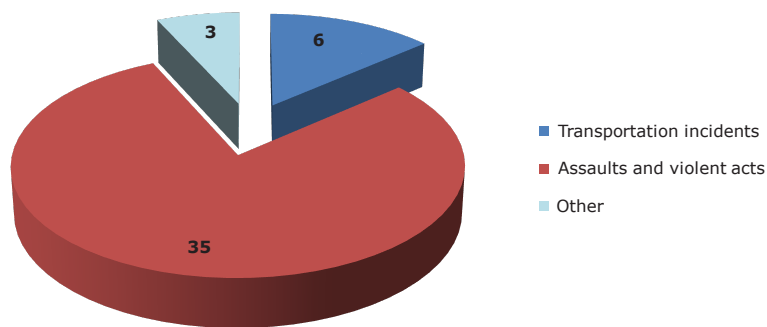


Figure 4.12. Fatal injuries by event/exposure, building material and supplies dealers, NAICS 4441, 2005.

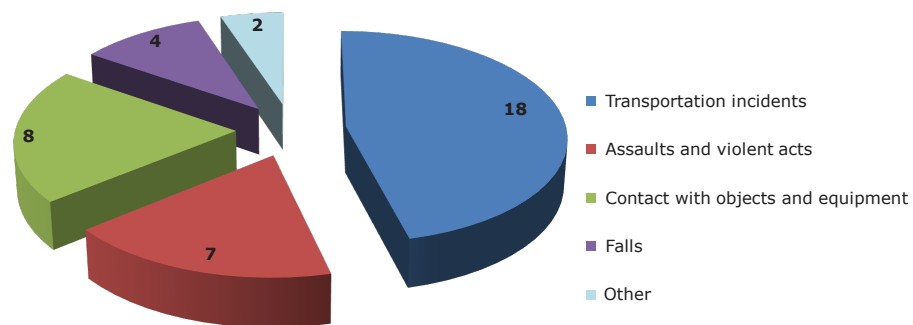


Figure 4.14. Fatal injuries by event/exposure, automobile dealers, NAICS 4411, 2005.

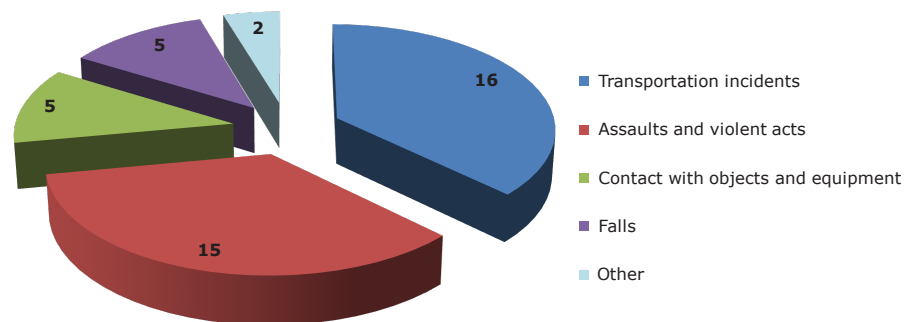


Figure 4.13. Fatal injuries by event/exposure, other building material dealers, NAICS 44419, 2005.

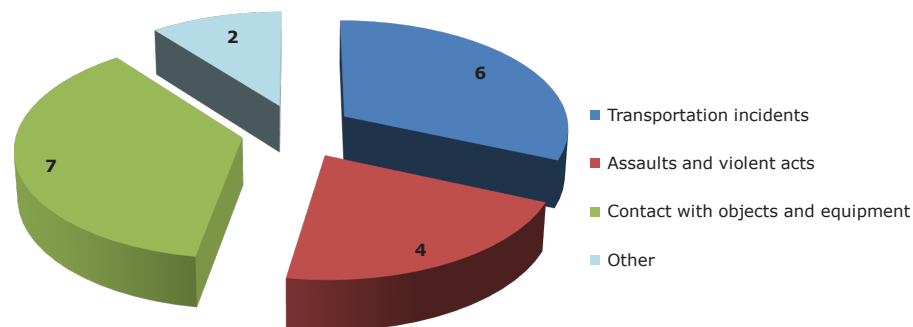


Figure 4.15. Fatal injuries by event/exposure, new car dealers, NAICS 44111, 2005.

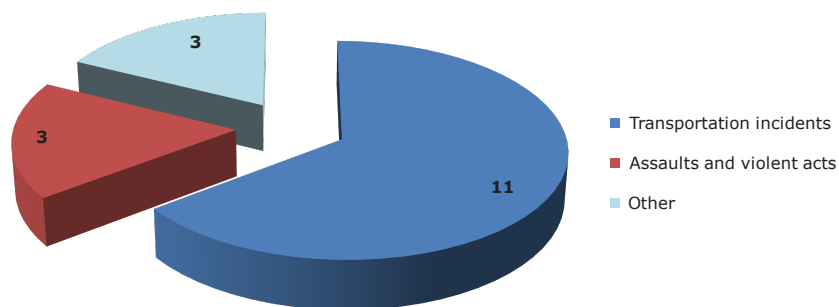


Figure 4.16. Fatal injuries by event/exposure, used car dealers, NAICS 44112, 2005.

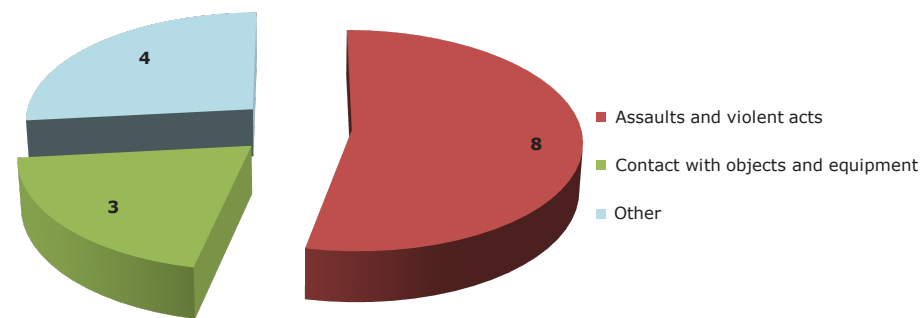


Figure 4.18. Fatal injuries by event/exposure, home centers, NAICS 44411, 2005.

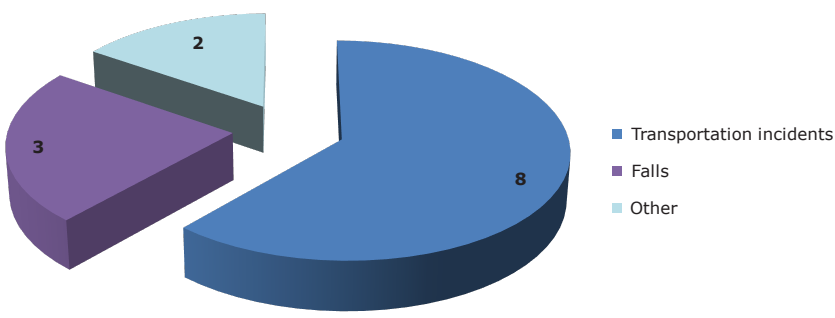
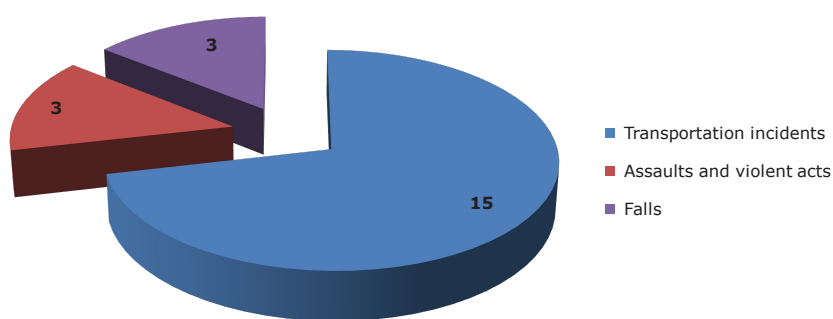


Figure 4.17. Fatal injuries by event/exposure, direct selling establishments, NAICS 4543, 2005.



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Nonfatal Injuries/Illnesses in High-Risk Wholesale Trade Subsectors

Beer, wine and distilled alcoholic beverage wholesale merchants
(NAICS 4548)

Grocery and related product merchant wholesalers (NAICS 4244)

Metal and mineral [except petroleum] merchant wholesalers
(NAICS 4235)

Lumber and other construction materials merchant wholesalers
(NAICS 4233)

Farm product raw material merchant wholesalers (NAICS 4245)

Motor vehicles and motor vehicle parts and supplies merchant wholesalers (NAICS 4231)

Nonfatal Injuries/Illnesses in Selected Wholesale Trade Subsectors

(Figures 4.19 through 4.66)

The following section presents occupational injury/illness data for selected wholesale trade subsectors. These subsectors were selected from those with the highest rates and numbers of injuries and illnesses in 2005. Injury/illness cases are broken out by demographic factors such as age, gender, race/ethnicity, and occupation of the worker and by characteristics such as nature and source of injury/illness, event or exposure leading to injury/illness, and part of body injured.

The resultant set of charts for each subsector provides insight into likely injury/illness risk scenarios, and prevention options that should be useful in identifying priorities for further analysis, research, and prevention practice.

Demographic Factors

Worker age

Injuries/illnesses in the high-risk wholesale trade subsectors presented in this Chartbook tended to occur most frequently among 25- to 34-year-old workers or 35- to 44-year-old workers. The younger of the two age groups experienced more injuries/illnesses in beer, wine, and distilled alcoholic beverage merchant wholesalers (NAICS 4548), grocery and related product merchant wholesalers (NAICS 4244), and lumber and other construction materials (NAICS 4233).

Workers under 20 years of age and workers 65 years of age or older tended to incur only a

very small proportion of all injuries/illnesses in a subsector. Proportions ranged from 0 injuries/illnesses to 2.6% of all subsector injuries/illnesses for the 16–19-year-old age group; whereas, proportions generally ranged from 0 injuries/illnesses to 2.1% of all subsector injuries/illnesses. A startling exception was found in motor vehicles and motor vehicle parts and supplies (NAICS 4231) where 11.7% of all workers suffering injuries or illnesses were 65 years old or older.

Worker gender

Mirroring the distribution of workers by gender in the wholesale trade workforce described earlier, the injuries/illnesses experienced in most of the wholesale subsectors were overwhelmingly among male workers. In fact, in four of the six subsectors highlighted herein, at least 90% (and up to about 97% in the beer, wine, and distilled alcoholic beverage subsector—NAICS 4548) of workers suffering injury or illness were male. Subsectors in which proportionately fewer males suffered injury or illness included motor vehicles and motor-vehicle parts and supplies (NAICS 4231), where the ratio was about 87% male to 13% female and farm product raw material merchant wholesalers (NAICS 4245), where about 79% of workers suffering injury or illness were male.

Worker race/ethnicity

This analysis of nonfatal injuries/illnesses within high-risk wholesale subsectors is perhaps the least meaningful analysis because of the large percentage of injuries/illnesses for which race/ethnicity was not reported. For example, race/ethnicity was not reported in 41% (nearly 7,500) of the 18,000-plus injuries/illnesses that occurred among Grocery and related product merchant wholesalers (NAICS 4244) in 2005. For other

subsectors, the “not reported” cases ranged in proportion from about 14%–34%. In the one subsector with no cases unreported (farm product raw material merchant wholesalers—NAICS 4245), white only was reported for 82.2% of the injured workers, and Hispanic or Latino only accounted for the remaining 17.8% of injured workers.

Worker occupation

Workers in the transportation and material moving occupations experienced a majority of the injuries/illnesses in the high-risk wholesale subsectors presented herein. For example, this occupational group represented more than 84% of the injuries/illnesses in the beer, wine, and distilled alcoholic beverage merchant wholesalers (NAICS 4548) subsector, and more than 71% of the injuries/illnesses in the grocery and related product merchant wholesalers (NAICS 4244) subsector. Other occupational categories that experienced substantial numbers of injuries/illnesses included installation, maintenance, and repair occupations in the motor vehicle and motor vehicle parts and supplies merchant wholesalers (NAICS 4231) subsector; and production occupations in the grocery and related product merchant wholesalers (NAICS 4244) subsector and the metal and mineral (except petroleum) merchant wholesalers (NAICS 4235) subsector.

Injury/Illness Characteristics

Injury/illness data broken out by descriptive categories such as nature of injury/illness, source of injury/illness, event/exposure leading to injury/illness, and body part involved can provide insight into risk and likely injury/illness circumstances and scenarios. In the wholesale trade sector at large, the data indicate that sprains/strains was the leading nature of injury/illness in wholesale trade, followed by traumatic outcomes such as fractures, cuts/lacerations/punctures, and bruises. The leading source of injury/illness was containers; followed by vehicles; floor, ground surfaces; and parts and materials. Events/exposures that contributed to more injuries/illnesses in the wholesale sector in 2005 than any others were overexertion (28.6% of injuries) and contact with objects (26.8%), followed at a distance by fall on the same level (10.7%) and transportation incidents (8.0%). (See Chapter 3.)

This snapshot of the overall wholesale trade industry suggests that the prevalent mode of injury/illness faced in wholesale companies is associated with the handling and movement of products. Sprain/strain injuries to the trunk (primarily the back) resulting from overexertion while handling or moving products or acute traumatic injuries resulting from contact with objects such as packaged or unpackaged products, parts, or materials, are the two scenarios common to all six wholesale subsectors presented in this chapter.

Nature of injury/illness

There are differences noted among these subsectors, however. For example, although sprain/strain is the leading nature of injury/illness

in each subsector, the proportion of such injuries/illnesses is greater than 50% of all injuries/illnesses in the beer, wine, and distilled alcoholic beverage merchant wholesalers (NAICS 4548) (54.7%) and grocery and related product merchant wholesalers (NAICS 4244) (54.9%) subsectors.

Source of injury/illness

In two subsectors—beer, wine, and distilled alcoholic beverage merchant wholesalers (NAICS 4548) and grocery and related product merchant wholesalers (NAICS 4244)—containers were the primary source of injury/illness. However, parts and materials were the primary sources of injury/illness in metal and mineral (except petroleum) merchant wholesalers (NAICS 4235), lumber and other construction materials merchant wholesalers (NAICS 4233), and motor vehicles and motor vehicle parts and supplies merchant wholesalers (NAICS 4231), representing 30.0%, 24.3%, and 31.2% of all the injuries/illnesses in those sectors, respectively. In two of the three subsectors (NAICS 4235 and 4233), floors, walkways, or ground surfaces were the second most frequent sources of injury/illness. Floors, walkways, or ground surfaces were the primary source of injury/illness in farm product raw material merchant wholesalers (NAICS 4245) subsector, followed by vehicles (13.8%) and containers (10.1%)

Event/exposure

As in wholesale trade, overexertion and contact with objects were the two leading contributors to injury/illness among event/exposure categories. However, differences among subsectors are noted. Contact with objects was the leading contributor (65.5%) to injury/illness in metal and mineral (except petroleum) merchant wholesalers (NAICS 4235) with overexertion, which represented only

11.4% of subsector injuries/illnesses, a distant second. Contact with objects was also the most frequent event/exposure contributing to injury/illness in the motor vehicle and motor vehicle parts and supplies merchant wholesalers (NAICS 4231) and lumber and other construction materials merchant wholesalers (NAICS 4233) subsectors. However, the gap between contact with objects and overexertion, the second most frequent event/exposure leading to injury/illness in these subsectors, is much narrower (37.1%–23.1% and 29.3%–25.3%, respectively).

Overexertion is the most frequent event/exposure contributing to injury/illness in two subsectors: beer, wine, and distilled alcoholic beverage merchant wholesalers (NAICS 4548) and grocery and related product merchant wholesalers (NAICS 4245) subsector, representing 44.7% of the injuries/illnesses. Contact with objects (24.3%) was second in frequency among events/exposures contributing to injury/illness in this sector.

Part of body

The trunk, followed by lower extremities and upper extremities, was the body part most often involved in injury/illness cases in all sectors except farm product raw material subsector (NAICS 4245), in which lower extremities (44.6%) were involved more frequently than the trunk (29.5%).

Beer, wine, and distilled alcoholic beverage merchant wholesalers (NAICS 4548)

Figure 4.19. Nonfatal injuries/illnesses by age, NAICS 4548, 2005.

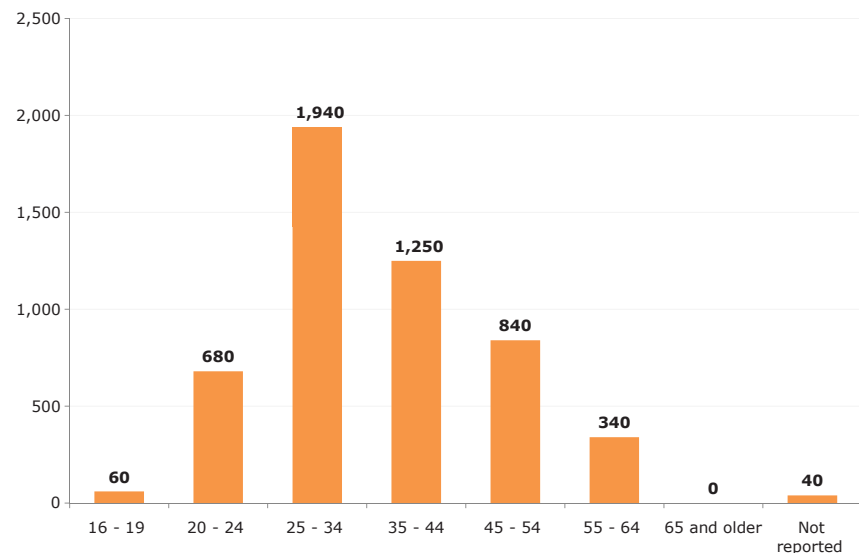


Figure 4.20. Nonfatal injuries/illnesses by gender, NAICS 4548, 2005.

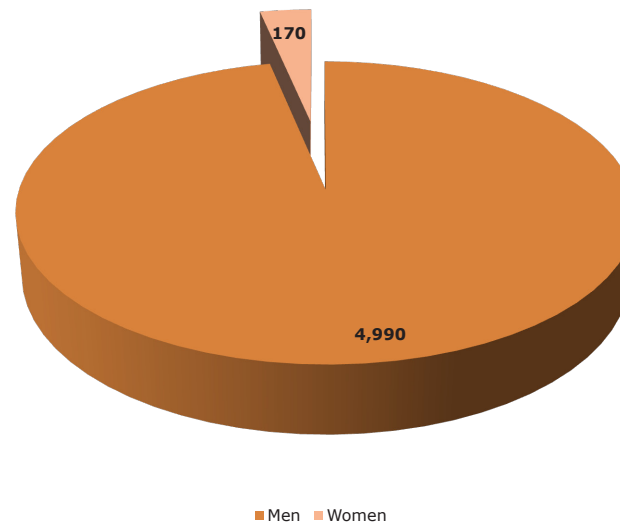


Figure 4.21. Nonfatal injuries/illnesses by race/ethnicity, NAICS 4548, 2005.

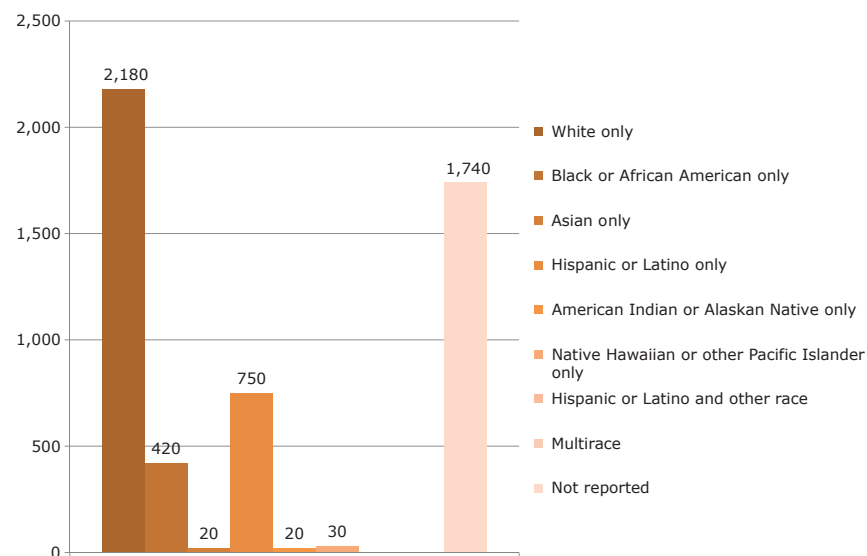
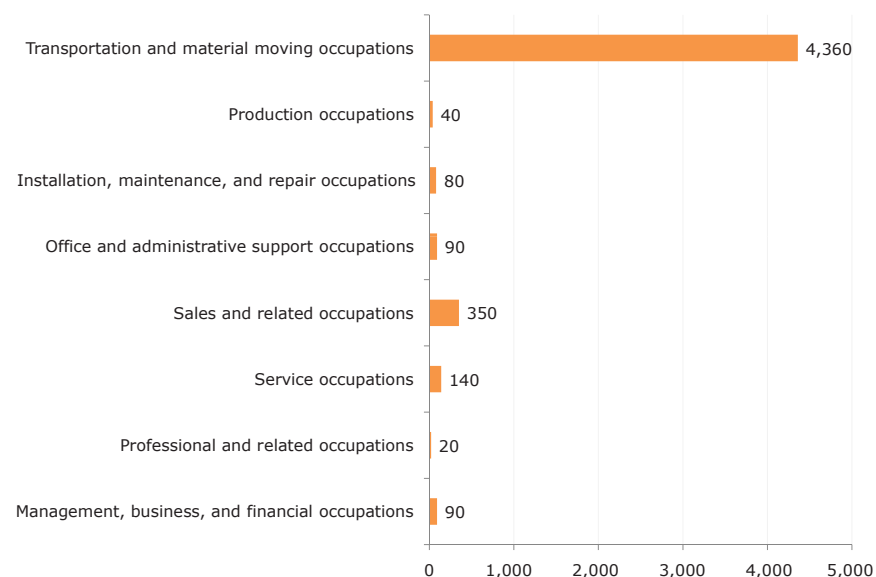


Figure 4.22. Nonfatal injuries/illnesses by occupation, NAICS 4548, 2005.



Beer, wine, and distilled alcoholic beverage merchant wholesalers (NAICS 4548)

Figure 4.23. Nonfatal injuries/illnesses by nature of injury/illness, NAICS 4548, 2005.

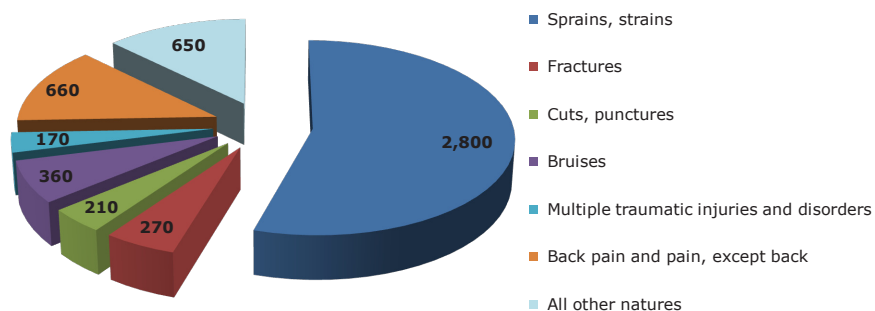


Figure 4.24. Nonfatal injuries/illnesses by source of injury/illness, NAICS 4548, 2005.

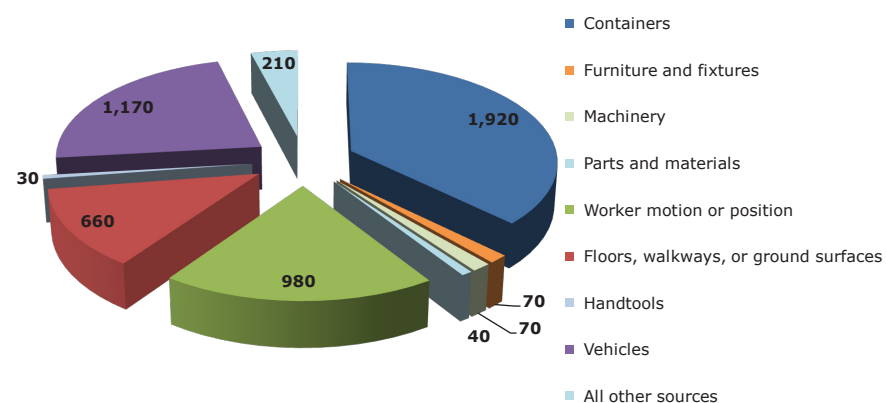


Figure 4.25. Nonfatal injuries/illnesses by event/exposure, NAICS 4548, 2005.

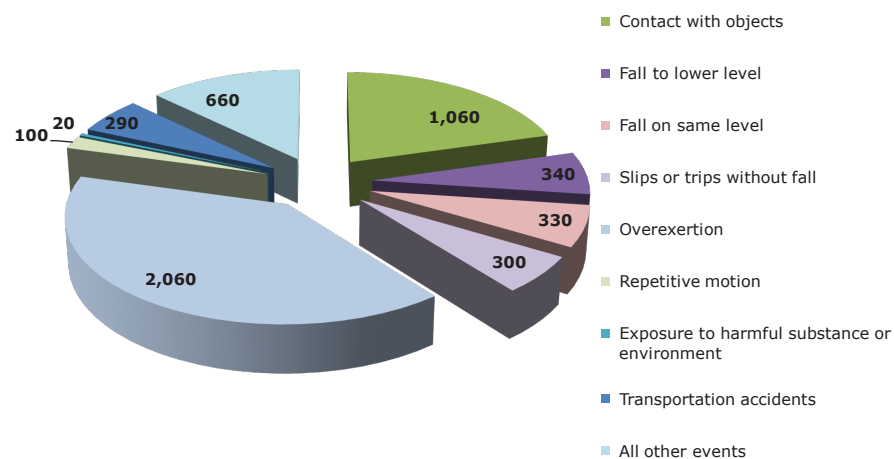
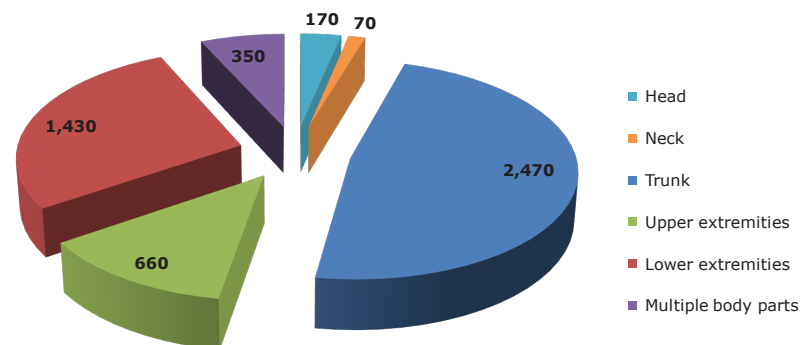


Figure 4.26. Nonfatal injuries/illnesses by part of body involved, NAICS 4548, 2005.



Grocery and related product merchant wholesalers (NAICS 4244)

Figure 4.27. Nonfatal injuries/illnesses by age, NAICS 4244, 2005.

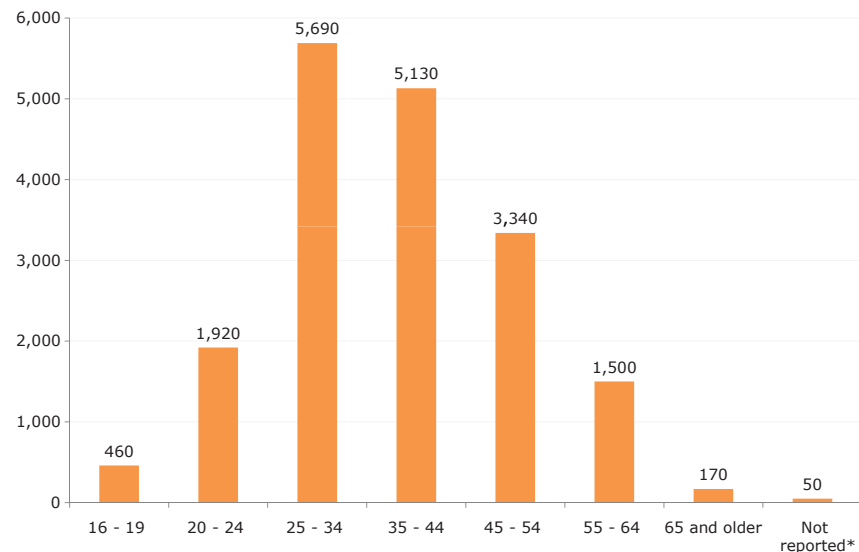


Figure 4.28. Nonfatal injuries/illnesses by gender, NAICS 4244, 2005.

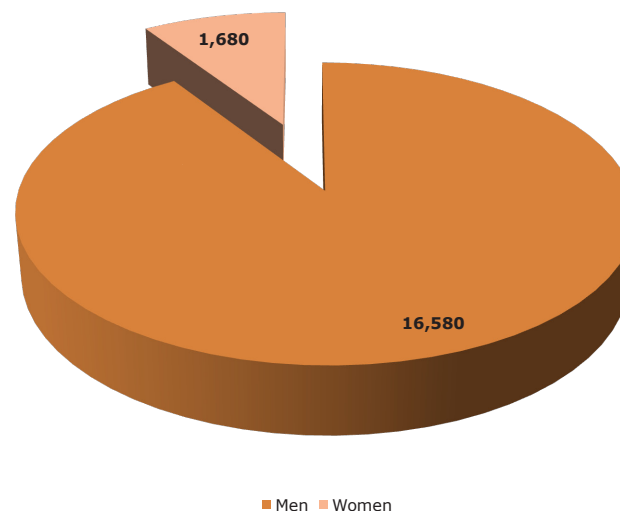


Figure 4.29. Nonfatal injuries/illnesses by race/ethnicity, NAICS 4244, 2005.

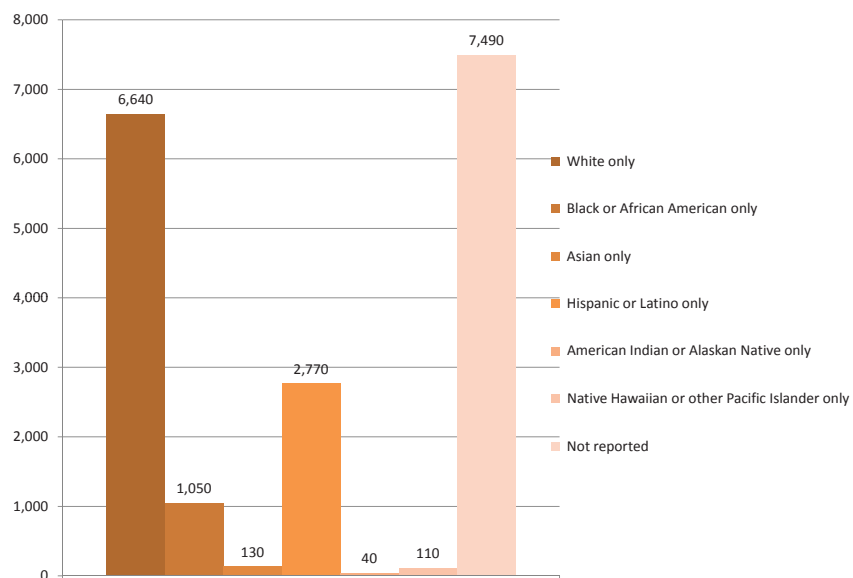
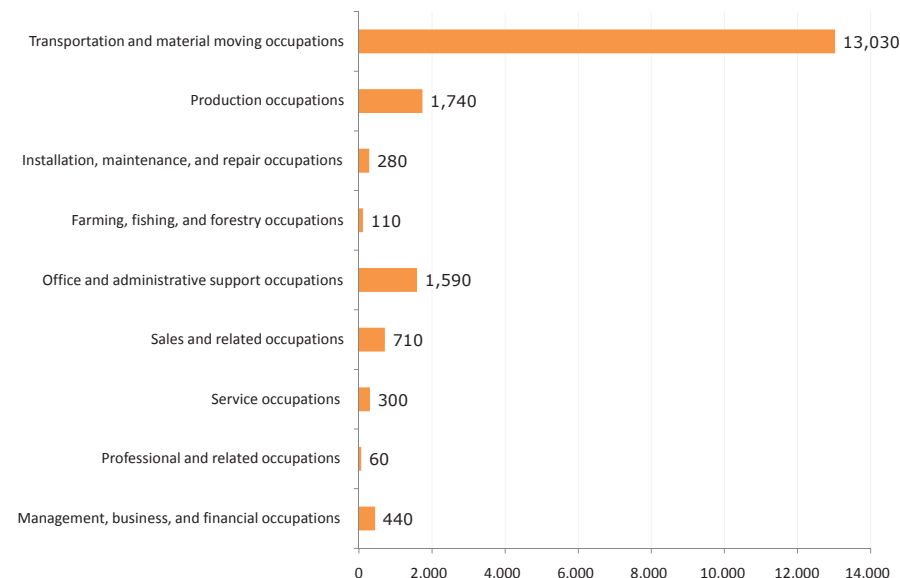


Figure 4.30. Nonfatal injuries/illnesses by occupation, NAICS 4244, 2005.



Grocery and related product merchant wholesalers (NAICS 4244)

Figure 4.31. Nonfatal injuries/illnesses by nature of injury/illness, NAICS 4244, 2005.

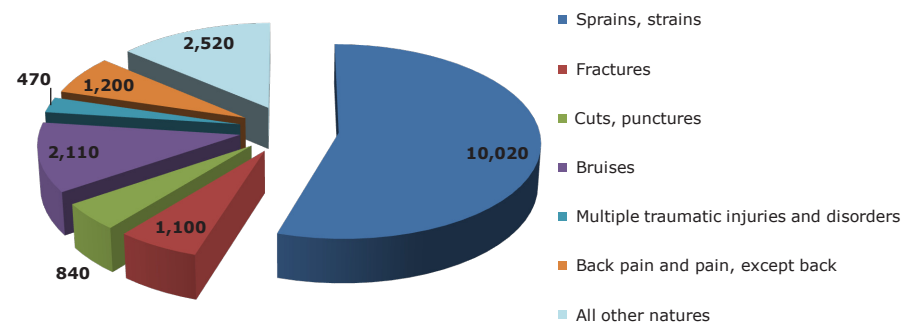


Figure 4.32. Nonfatal injuries/illnesses by source of injury/illness, NAICS 4244, 2005.

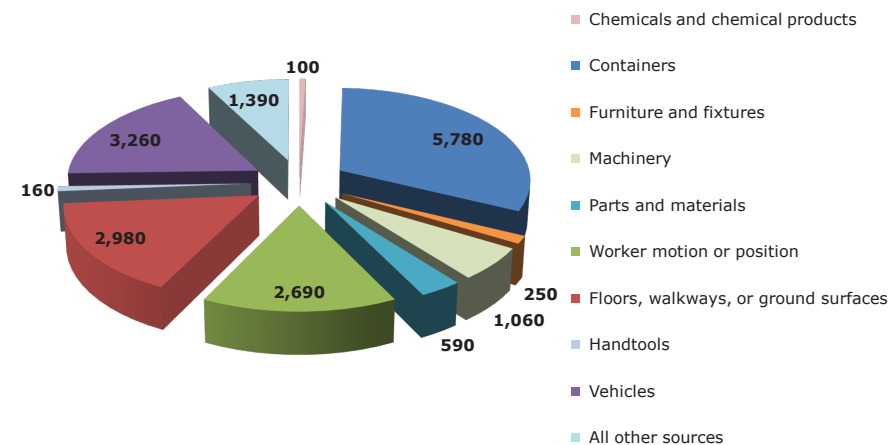


Figure 4.33. Nonfatal injuries/illnesses by event/exposure, NAICS 4244, 2005.

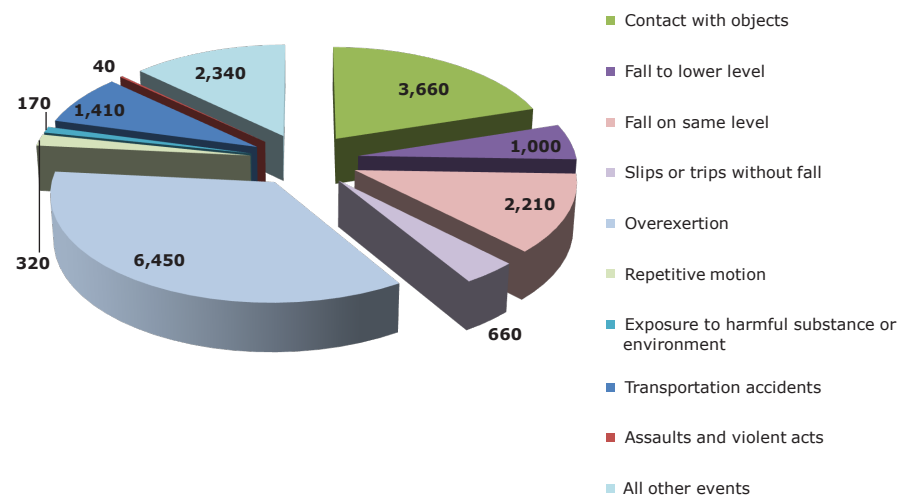
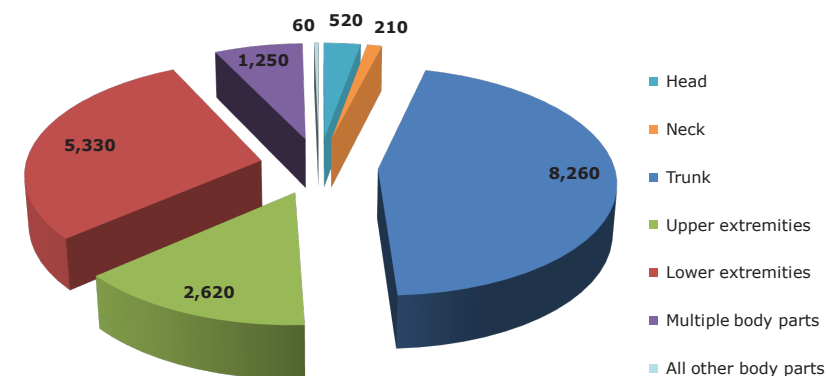


Figure 4.34. Nonfatal injuries/illnesses by part of body involved, NAICS 4244, 2005.



Metal and mineral [except petroleum] merchant wholesalers (NAICS 4235)

Figure 4.35. Nonfatal injuries/illnesses by age, NAICS 4235, 2005.

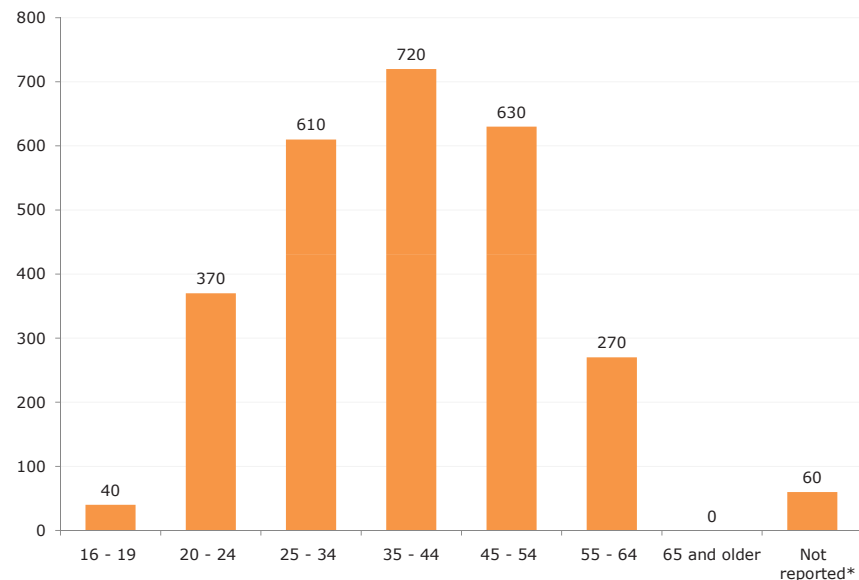


Figure 4.36. Nonfatal injuries/illnesses by gender, NAICS 4235, 2005.

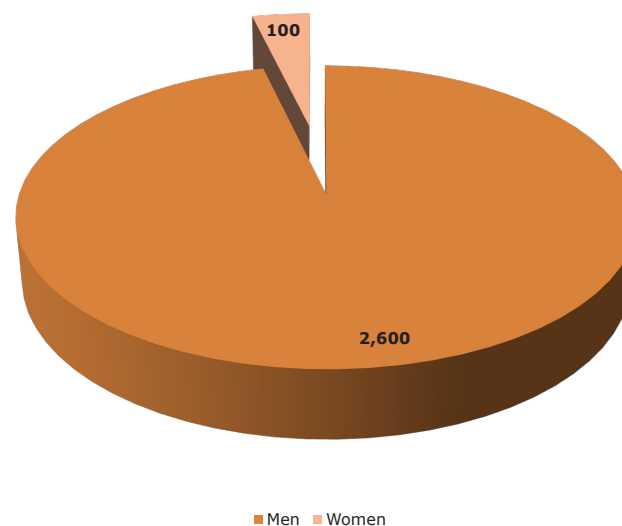


Figure 4.37. Nonfatal injuries/illnesses by race/ethnicity, NAICS 4235, 2005.

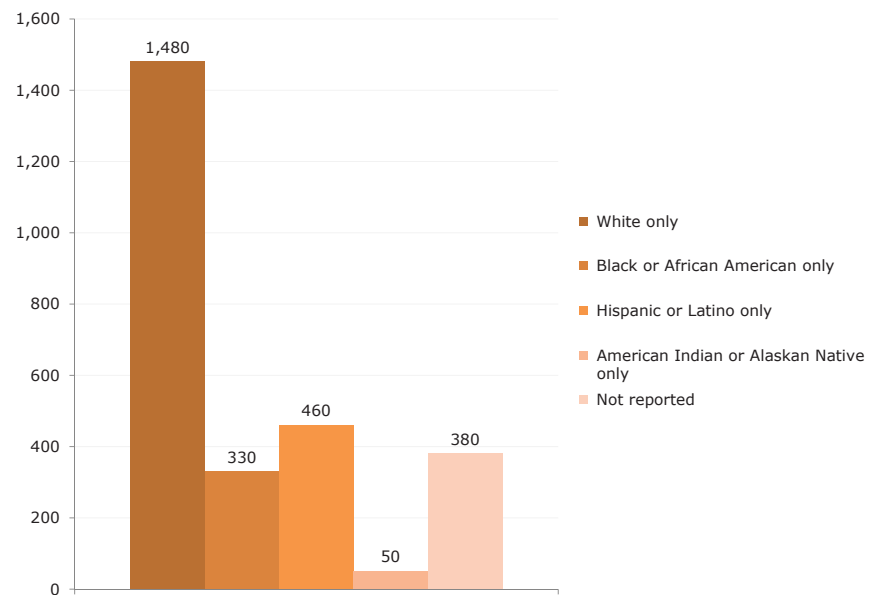
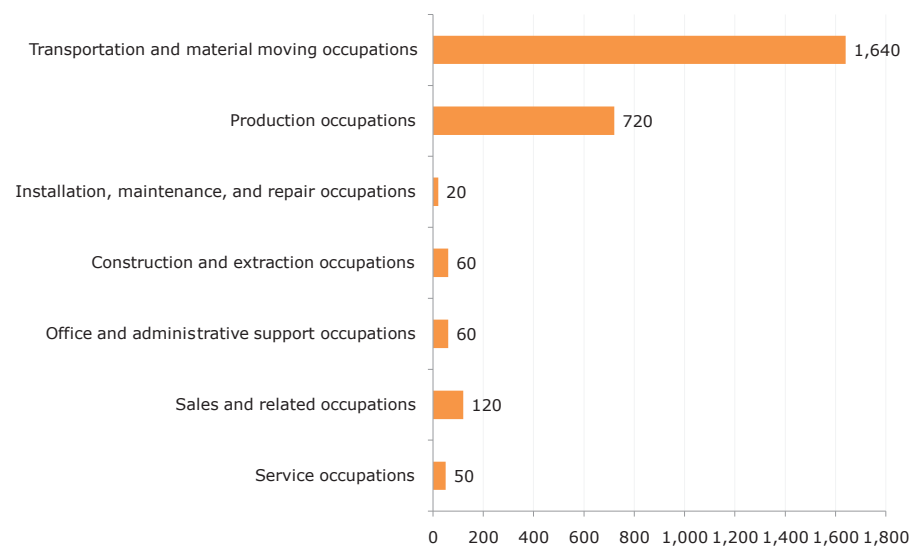


Figure 4.38. Nonfatal injuries/illnesses by occupation, NAICS 4235, 2005.



Metal and mineral [except petroleum] merchant wholesalers (NAICS 4235)

Figure 4.39. Nonfatal injuries/illnesses by nature of injury/illness, NAICS 4235, 2005.

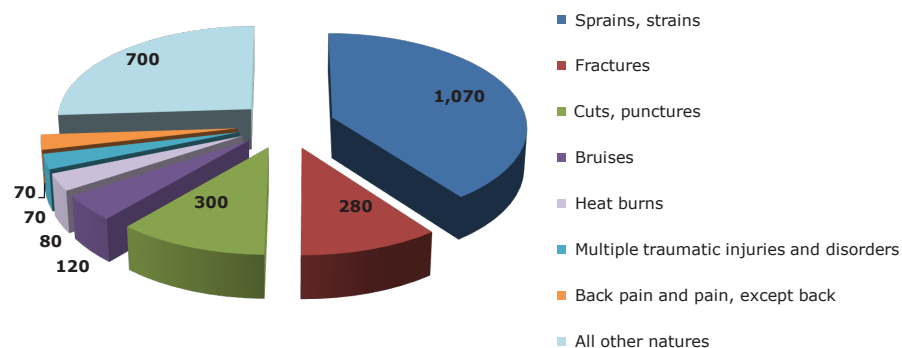


Figure 4.40. Nonfatal injuries/illnesses by source of injury/illness, NAICS 4235, 2005.

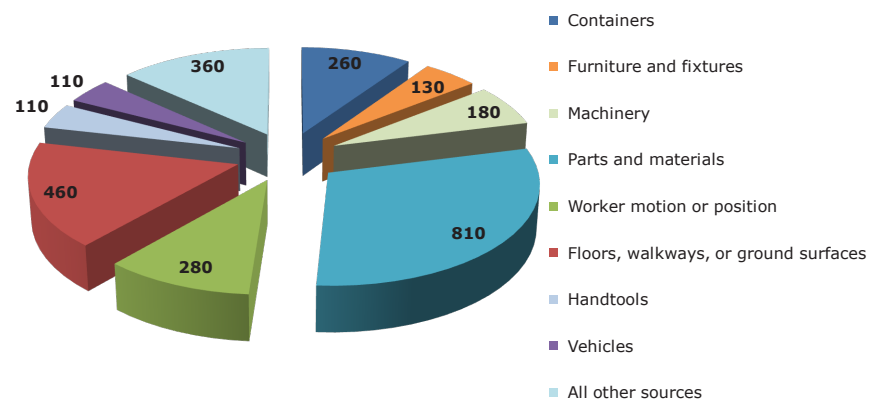


Figure 4.41. Nonfatal injuries/illnesses by event/exposure, NAICS 4235, 2005.

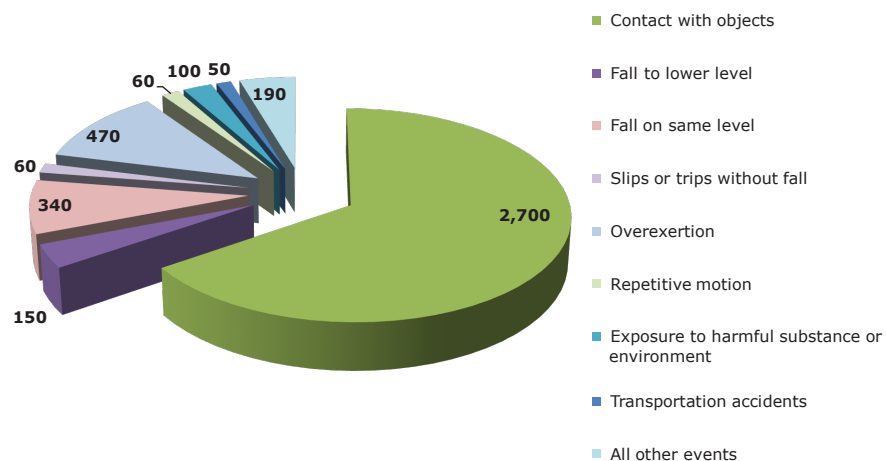
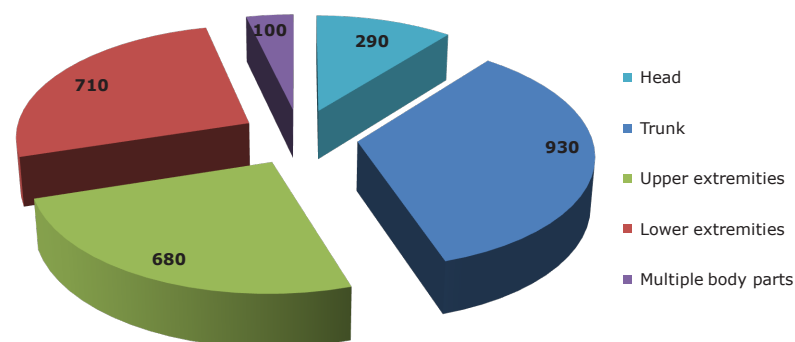


Figure 4.42. Nonfatal injuries/illnesses by part of body involved, NAICS 4235, 2005.



Lumber and other construction materials merchant wholesalers (NAICS 4233)

Figure 4.43. Nonfatal injuries/illnesses by age, NAICS 4233, 2005.

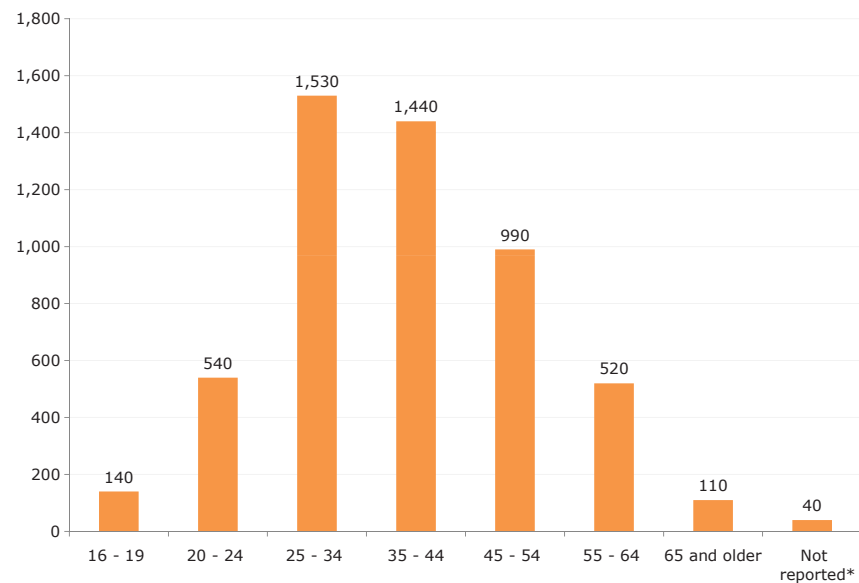


Figure 4.44. Nonfatal injuries/illnesses by gender, NAICS 4233, 2005.

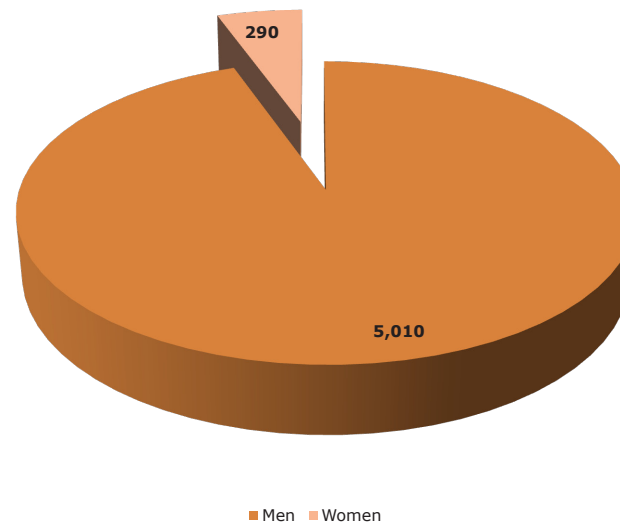


Figure 4.45. Nonfatal injuries/illnesses by race/ethnicity, NAICS 4233, 2005.

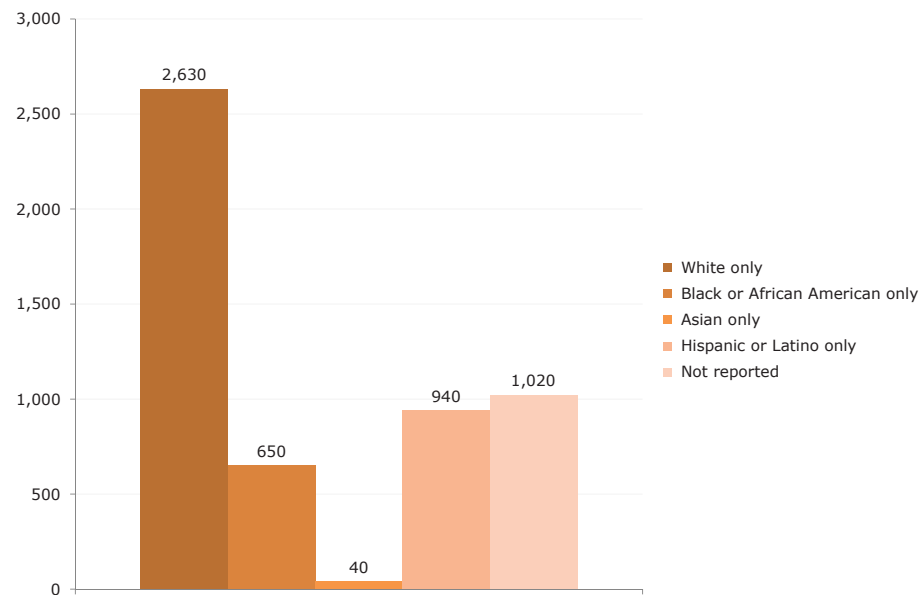
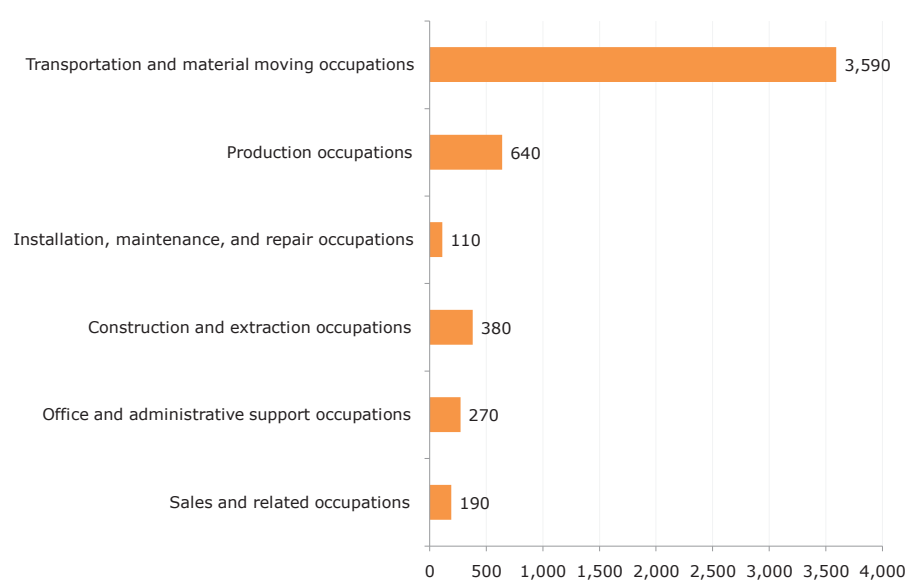


Figure 4.46. Nonfatal injuries/illnesses by occupation, NAICS 4233, 2005.



Lumber and other construction materials merchant wholesalers (NAICS 4233)

Figure 4.47. Nonfatal injuries/illnesses by nature of injury/illness, NAICS 4233, 2005.

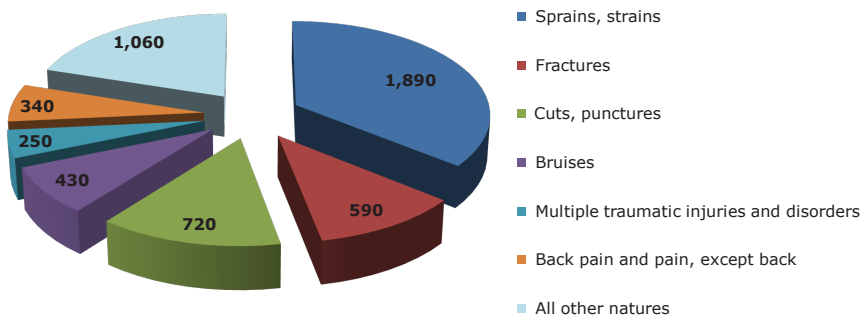


Figure 4.48. Nonfatal injuries/illnesses by source of injury/illness, NAICS 4233, 2005.

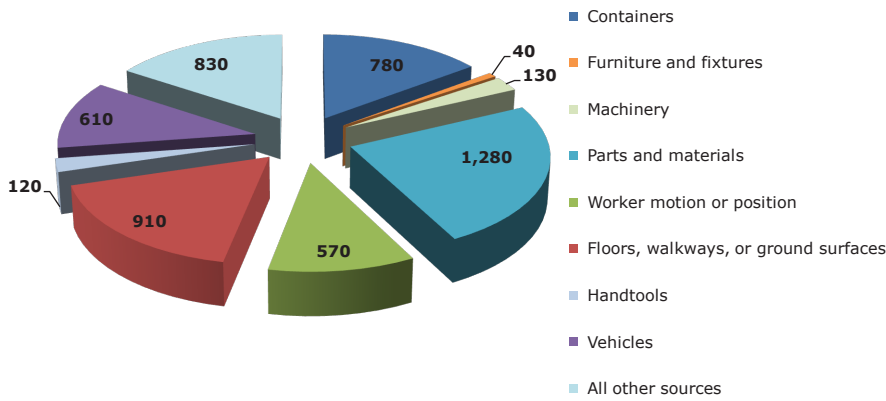


Figure 4.49. Nonfatal injuries/illnesses by event/exposure, NAICS 4233, 2005.

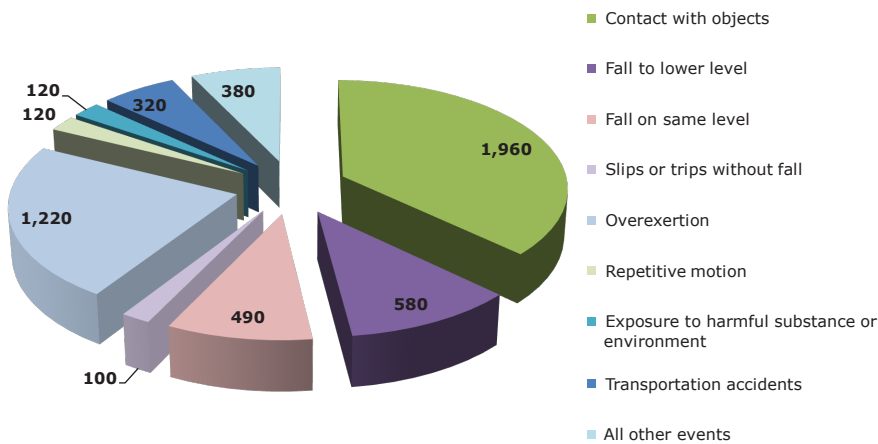
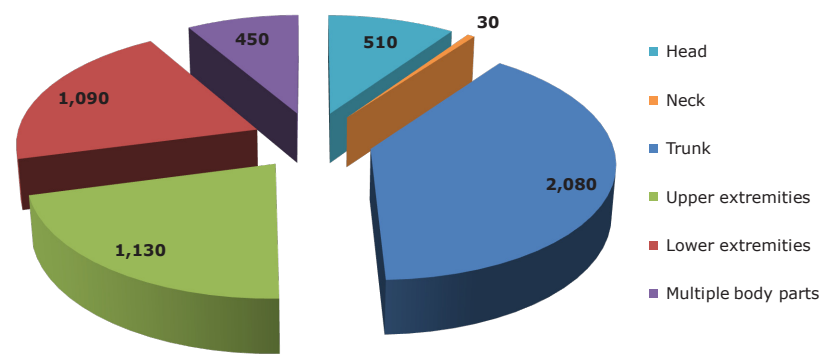


Figure 4.50. Nonfatal injuries/illnesses by part of body involved, NAICS 4233, 2005.



Farm product raw material merchant wholesalers (NAICS 4245)

Figure 4.51. Nonfatal injuries/illnesses by age, NAICS 4245, 2005.

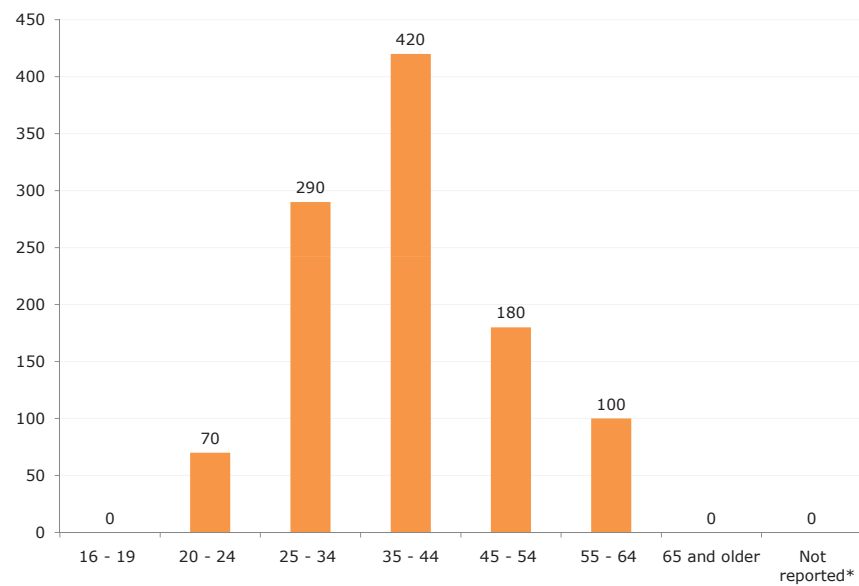


Figure 4.52. Nonfatal injuries/illnesses by gender, NAICS 4245, 2005.

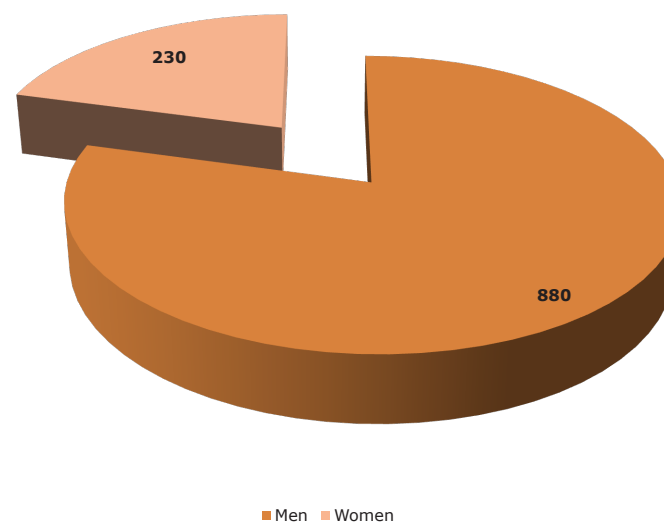


Figure 4.53. Nonfatal injuries/illnesses by race/ethnicity, NAICS 4245, 2005.

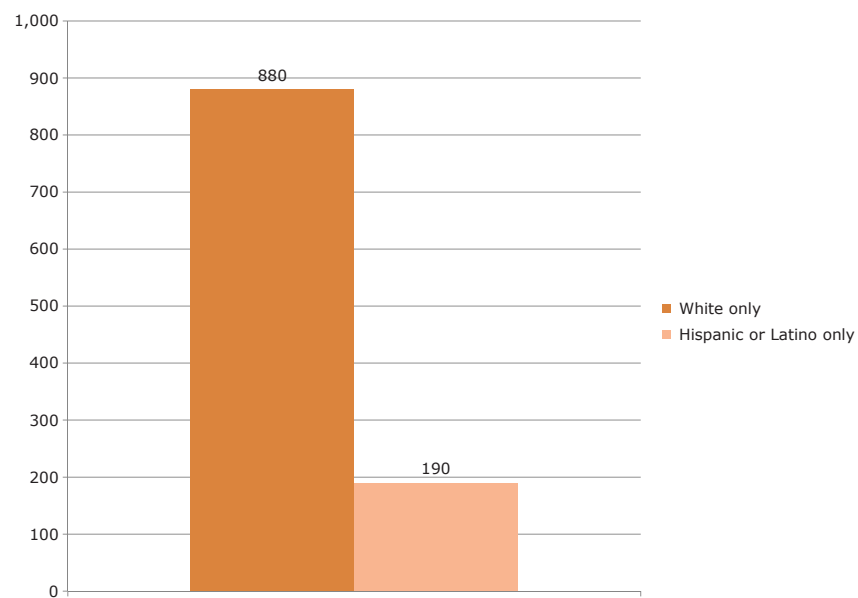
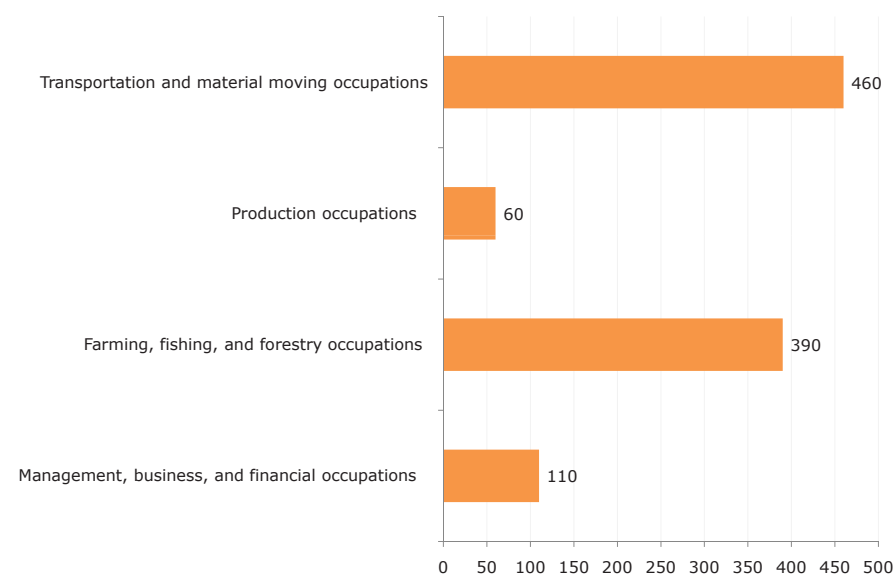


Figure 4.54. Nonfatal injuries/illnesses by occupation, NAICS 4245, 2005.



Farm product raw material merchant wholesalers (NAICS 4245)

Figure 4.55. Nonfatal injuries/illnesses by nature of injury/illness, NAICS 4245, 2005.

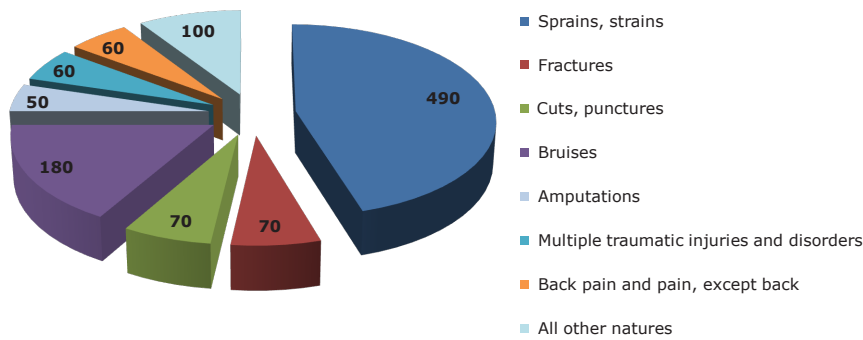


Figure 4.56. Nonfatal injuries/illnesses by source of injury/illness, NAICS 4245, 2005.

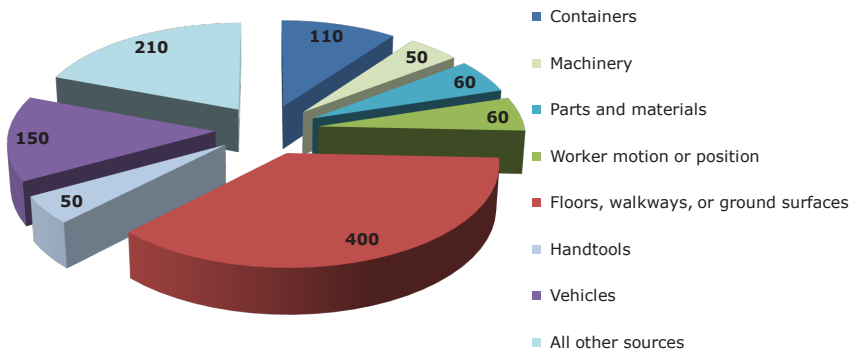


Figure 4.57. Nonfatal injuries/illnesses by event/exposure, NAICS 4245, 2005.

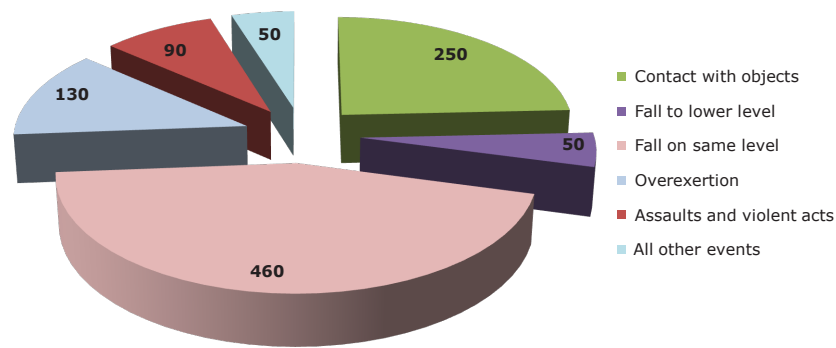
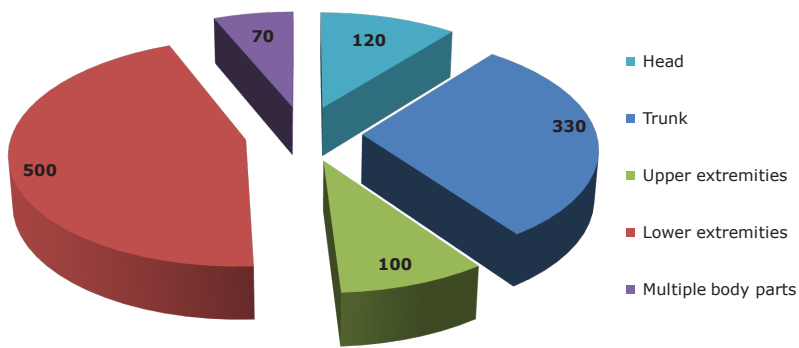


Figure 4.58. Nonfatal injuries/illnesses by part of body involved, NAICS 4245, 2005.



Motor vehicles and motor vehicle parts and supplies merchant wholesalers (NAICS 4231)

Figure 4.59. Nonfatal injuries/illnesses by age, NAICS 4231, 2005.

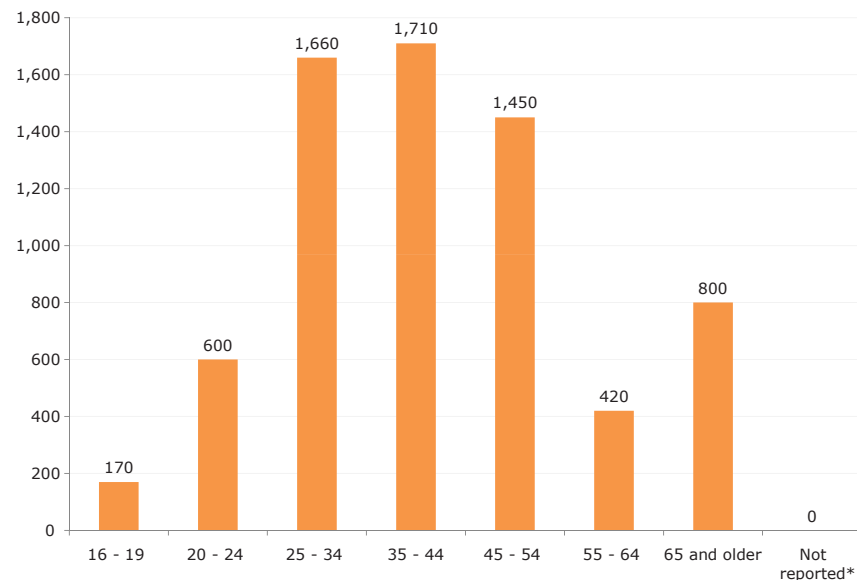


Figure 4.60. Nonfatal injuries/illnesses by gender, NAICS 4231, 2005.

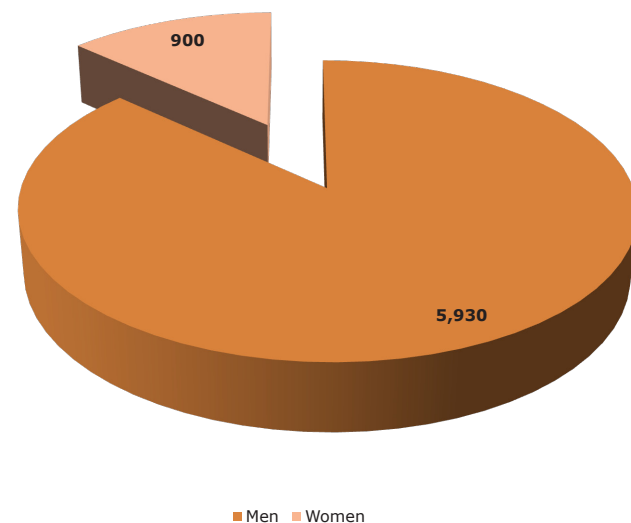


Figure 4.61. Nonfatal injuries/illnesses by race/ethnicity, NAICS 4231, 2005.

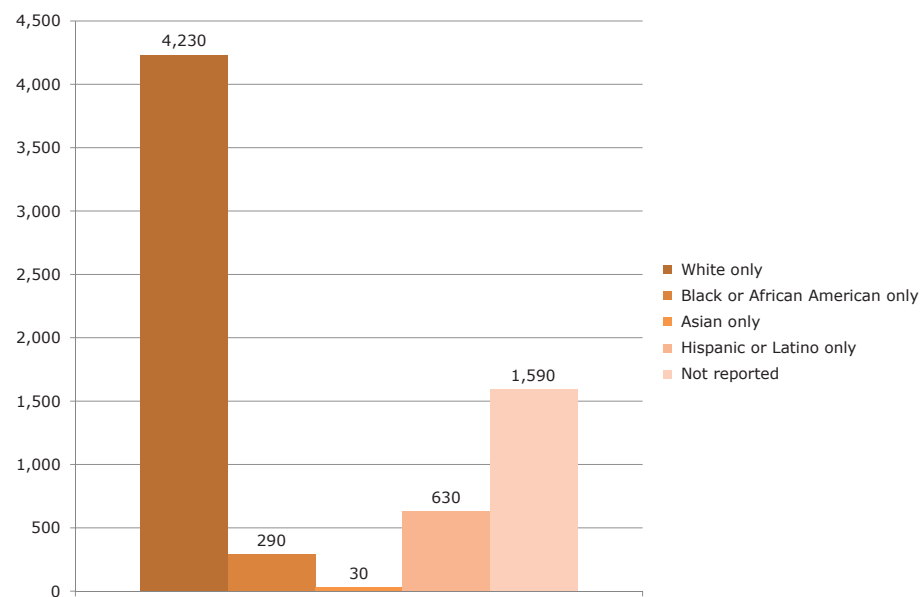
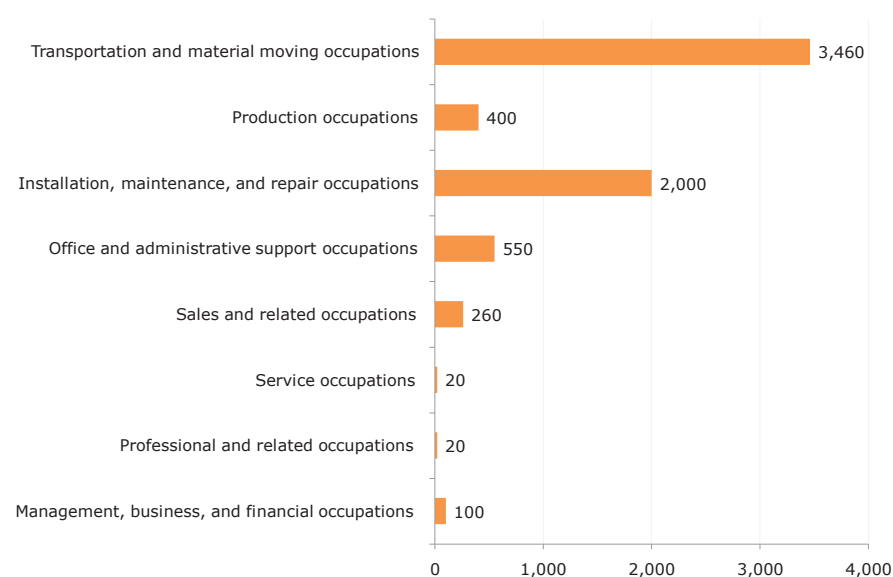


Figure 4.62. Nonfatal injuries/illnesses by occupation, NAICS 4231, 2005.



Motor vehicles and motor vehicle parts and supplies merchant wholesalers (NAICS 4231)

Figure 4.63. Nonfatal injuries/illnesses by nature of injury/illness, NAICS 4231, 2005.

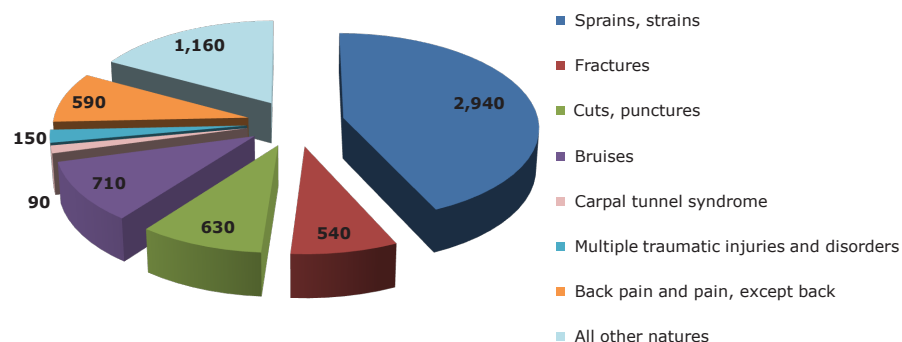


Figure 4.64. Nonfatal injuries/illnesses by source of injury/illness, NAICS 4231, 2005.

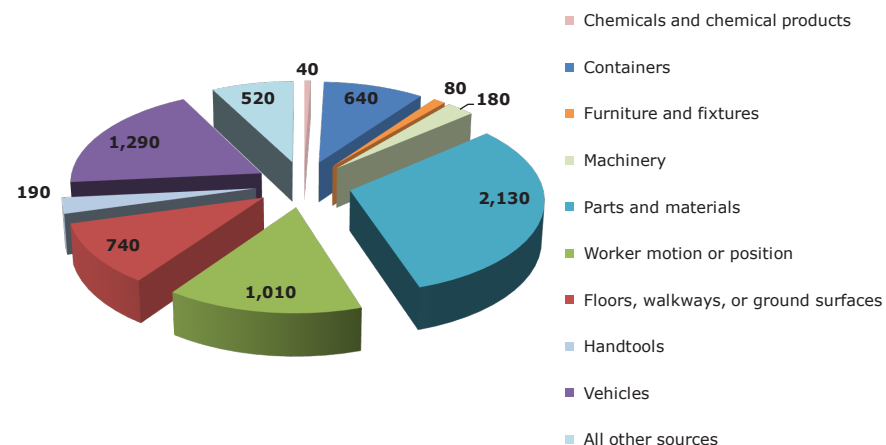


Figure 4.65. Nonfatal injuries/illnesses by event/exposure, NAICS 4231, 2005.

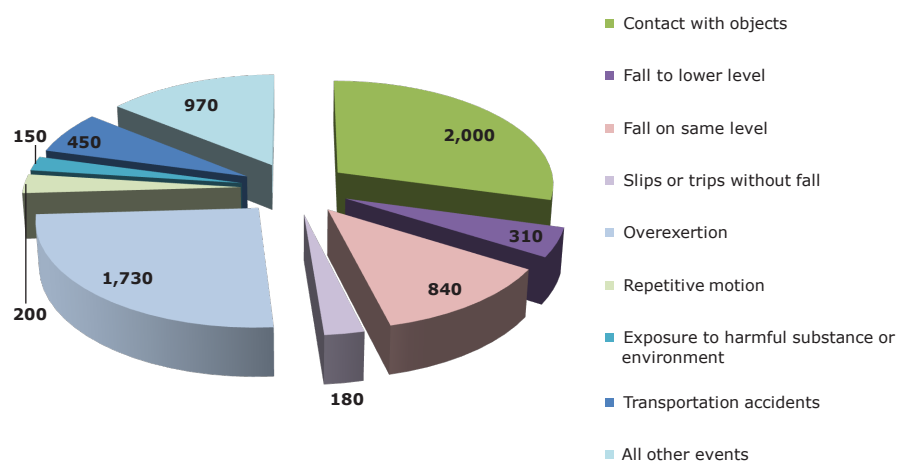
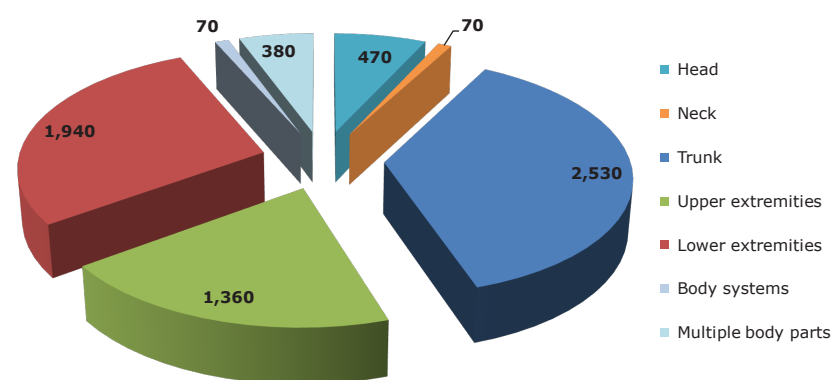


Figure 4.66. Nonfatal injuries/illnesses by part of body involved, NAICS 4231, 2005.



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Nonfatal Injuries/Illnesses in High-Risk Retail Trade Subsectors

Home centers (NAICS 44411)

Warehouse clubs and superstores (NAICS 45291)

Other building material dealers (NAICS 44419)

Tire dealers (NAICS 44132)

Supermarkets and other grocery [except convenience stores] (NAICS 44511)

Hobby, toy, and game stores (NAICS 45112)

New car dealers (NAICS 44111)

Department stores (NAICS 4521)

Nonfatal Injuries/Illnesses in Selected Retail Trade Subsectors *(Figures 4.67 through 4.130)*

The following section presents occupational injury/illness data for selected retail trade subsectors. These subsectors were selected from those that experienced the highest rates and numbers of injuries and illnesses in 2005. Injury/illness cases are broken out by demographic factors such as age, gender, race/ethnicity, and occupation as well as by characteristics such as nature and source of injury/illness, event or exposure leading to injury/illness, and part of body involved.

The resultant set of charts for each subsector provides insight into likely injury/illness risk scenarios, and prevention options that should be useful in identifying priorities for further analysis, research, and prevention practice.

Demographic Factors

Worker age

Injuries/illnesses in the high-risk retail trade subsectors presented in this Chartbook tended to occur most frequently among three age groups: 25–34 years, 35–44 years, and 45–54 years. The age group with most injuries/illnesses differed by subsector. The younger (25–34) group experienced more injuries/illnesses in home centers (NAICS 44411), other building material dealers (NAICS 44419), tire dealers (44132), and new car dealers (NAICS 44111). The older of the three groups (45–54) experienced the most injuries/illnesses in supermarket and other grocery

(except convenience) stores (NAICS 44511) and department stores (4521). Those ages 35–44 years experienced the highest number of nonfatal injuries/illnesses of all the age groups in the warehouse clubs and superstores (NAICS 45291). In the hobby, toy, and game stores subsector (NAICS 45112), the number of injuries/illnesses was about equal among the three age groups.

The eight retail subsectors presented for analysis here generally experienced higher numbers of injuries/illnesses among younger (< 20) and older (65+) workers than the wholesale subsectors presented. The proportion of the total injuries/illnesses represented by 16–19-year-olds ranged from 2.0% (tire dealers, NAICS 44132) to 8.6% (supermarket and other grocery (except convenience) stores, NAICS 44511). The proportion of total injuries/illnesses represented by workers ages 65 and older ranged from 0 (tire dealers, NAICS 44132) to 5.6% (department stores, NAICS 4521).

Worker gender

The proportion of injuries/illnesses to female workers in the selected retail subsectors ranged from only 2.8% (tire dealers, NAICS 44132) to 68.4% (hobby, toy and game stores, NAICS 45112). Other subsectors with a high percentage of female worker injuries/illnesses included department stores (NAICS 4521; 63.8%), warehouse clubs and superstores (NAICS 45291; 57.5%), and supermarkets and other grocery (except convenience) stores (NAICS 44511; 49.1%).

Worker Race/ethnicity

As in wholesale trade, for many injury/illness cases in retail trade, race/ethnicity information is not reported. For example, in 63.9% of the cases

reported for home centers (NAICS 44411), race/ethnicity was not reported. For other subsectors, the “not reported” ratio ranged from 19.8%–60.1%. In general, for the cases for which race/ethnicity data were reported, the large majority of workers were white only, followed by Hispanic or Latino only, black or African American, and Asian workers. There were, as usual, exceptions. For example, among tire dealers (NAICS 44132), black or African American workers had the second highest number of injuries/illnesses. Also, in the hobby, toy, and game stores (NAICS 45112) subsector, Asian workers had the third highest number of injuries/illnesses after white only, and Hispanic or Latino only.

Worker occupation

In the retail trade subsectors selected for presentation, the leading worker occupational groups for number of injuries/illnesses differed by subsectors. Sales and related occupations had more injuries/illnesses than other groups in warehouse clubs and superstores (NAICS 45291), supermarket and other grocery (except convenience) stores (NAICS 44511), and department stores (NAICS 4521). Transportation and material moving occupations had more injuries/illnesses in home centers (NAICS 44411) and new car dealers (NAICS 44111). In the hobby, toy, and game stores (NAICS 45112) subsector, office and administrative support occupations had more injuries/illnesses than any other occupational group.

Injury/Illness Characteristics

Injury/illness data broken out by descriptive categories such as nature of injury/illness, source

of injury/illness, event/exposure leading to injury/illness, and body part involved can provide insight into risk and likely injury/illness circumstances and scenarios that can suggest potential prevention options. In retail trade at large, as in wholesale trade, the data indicate that sprains, strains was the leading nature of injury/illness, followed by cuts, lacerations, punctures; bruises, contusions; and fractures. The leading source of injury/illness was containers, followed closely by floor, ground surfaces. Events/exposures that contributed to more injuries/illnesses than any others were contact with objects and overexertion, followed by falls on the same level. The part of body most often involved was the trunk (including back), followed by lower and upper extremities.

Nature of injury/illness

As in the retail trade sector at large, sprains/strains was the leading nature of injury/illness reported for cases in the selected high-risk subsectors. The proportion of sprain/strain injuries ranged from only 25.4% of all the injuries/illnesses incurred by workers in the hobby, toy, and game stores (NAICS 45112) subsector to 52.9% of the injuries/illnesses incurred by workers in home centers (NAICS 44411). In the other six high-risk subsectors, sprains/strains represents a remarkably consistent proportion of total injuries/illnesses, ranging from 38.9%–45.5% of all injuries reported.

Source of injury/illness

Three different sources of injury/illness represented the highest number of injuries within the selected subsectors: containers; parts and materials; and floors, walkways, or ground surfaces. Containers was the leading source of injury/illness in warehouse clubs and superstores

(NAICS 45291); supermarket and grocery (except convenience) stores (NAICS 44511); hobby, toy, and game stores (NAICS 45112); and department stores (NAICS 4521). Parts and materials was the leading source of injury/illness in tire dealers (NAICS 44132), home centers (NAICS 44411), and other building material dealers (NAICS 44419). Floors, walkways or ground surfaces was the leading source of injury/illness in new car dealers (NAICS 44111). Although the leading source of injury/illness in only one subsector, floors, walkways, or ground surfaces was the second leading source of injury/illness in five other subsectors.

Event/exposure

As in retail trade at large, overexertion and contact with objects were the two leading contributors to injury/illness among event/exposure categories. Contact with objects was the leading event/exposure contributing to injury/illness in six high-risk subsectors including new car dealers (NAICS 44111), tire dealers (44132), other building material dealers (NAICS 44419), supermarket and other grocery (except convenience) stores (NAICS 44511), hobby, toy, and game stores (NAICS 45112), and department stores (NAICS 4521). In all six, overexertion accounted for the second highest number of injuries/illnesses, usually by only a very narrow margin. For example, in other building material dealers (NAICS 44419) subsector, contact with objects accounted for 31.8% of the cases, and overexertion accounted for 29.6%. Overexertion was the leading event/exposure contributing to injuries/illnesses in home centers (NAICS 44411) and warehouse clubs and superstores (NAICS 45291). Contact with objects was the second leading event/exposure in these two subsectors by slim margins. In home

centers, the margin was 36.2%–29.9%; and in warehouse clubs and superstores, the margin was 31.5%–29.5%. Another important event/exposure contributing to injury/illness in the high-risk retail subsectors highlighted herein is fall on the same level, which was the third highest event/exposure in all eight subsectors.

Part of body

As in the wholesale subsectors presented, the trunk (including back) was the body part most often involved, followed by lower extremities and upper extremities. An exception was the hobby, toy, and game stores (NAICS 45112) subsector, in which the head was the leading body part involved (25.9% of all injuries), followed by the trunk (22.4%). In two subsectors, new car dealers (NAICS 44111) and supermarket and other grocery (except convenience) stores (NAICS 44511), upper extremities were the second most frequently involved body parts.

[A note about subsector-level analyses—It is important that employers, supervisors, safety and health professionals, and employees understand the risks facing them in the environment they work within. If available, company or facility-level data, in addition to work experience, are better yet for understanding risks and prevention opportunities. Researchers and policy makers can also use these data to set research and policy priorities.

In addition to the high-risk subsectors presented in this Chartbook, data for other subsectors may be extracted from the BLS data, and analyzed by these demographic and causal factor categories to provide a risk profile for each subsector. These analyses can provide a risk profile for each subsector, which, along with industry experience, can help drive research and prevention activities.]

Home centers (NAICS 44411)

Figure 4.67. Nonfatal injuries/illnesses by age, NAICS 44411, 2005.

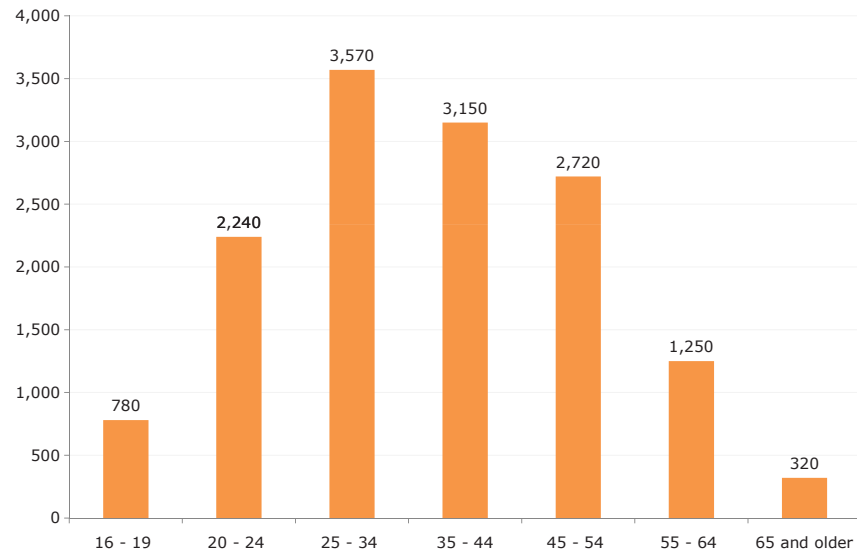


Figure 4.68. Nonfatal injuries/illnesses by gender, NAICS 44411, 2005.

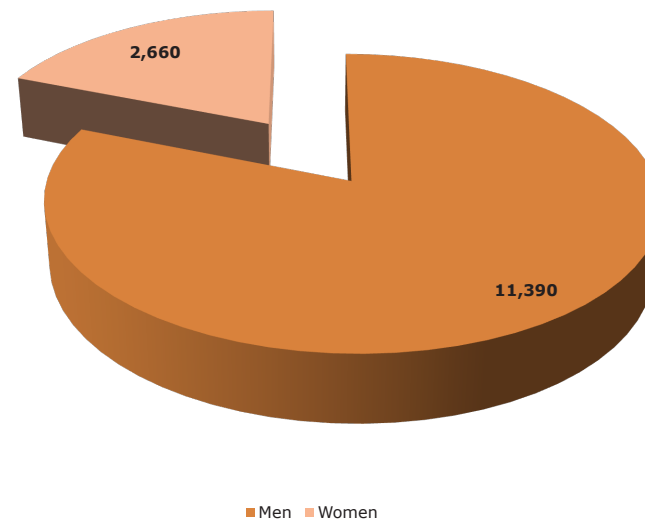


Figure 4.69. Nonfatal injuries/illnesses by race/ethnicity, NAICS 44411, 2005.

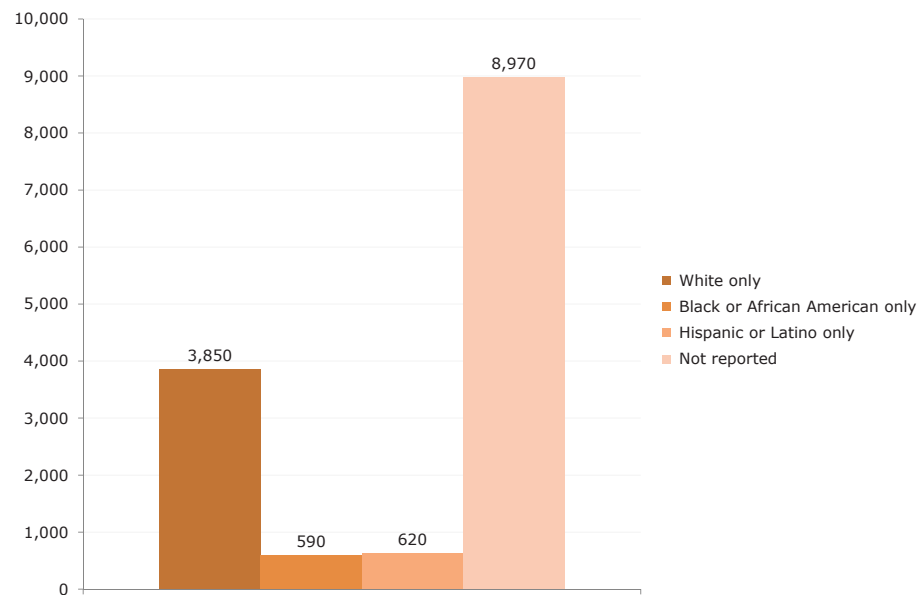
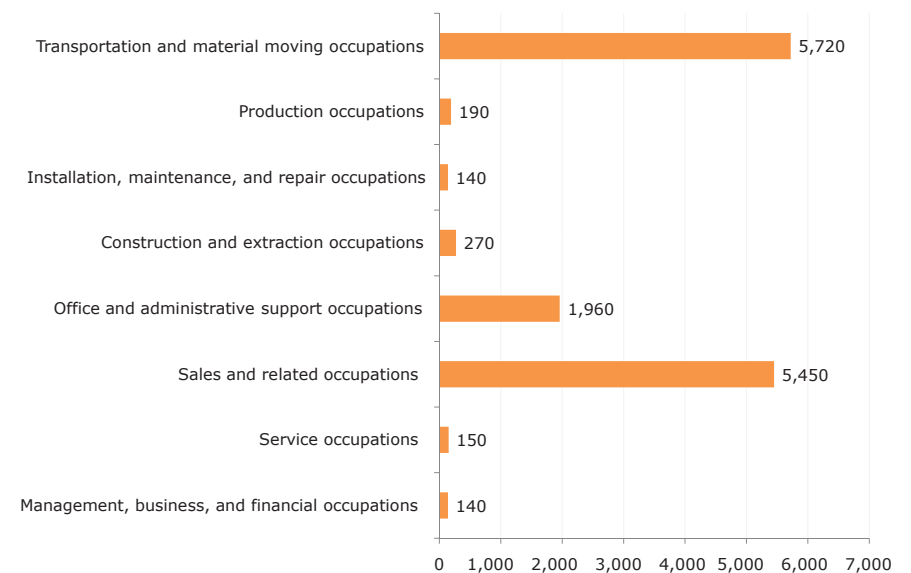


Figure 4.70. Nonfatal injuries/illnesses by occupation, NAICS 44411, 2005.



Home centers (NAICS 44411)

Figure 4.71. Nonfatal injuries/illnesses by nature of injury/illness, NAICS 44411, 2005.

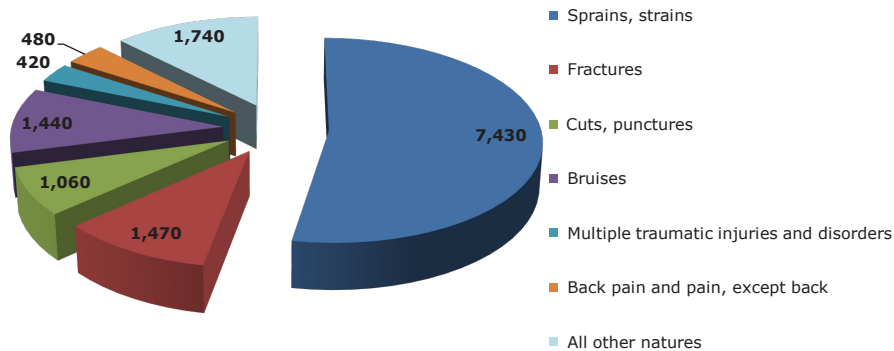


Figure 4.72. Nonfatal injuries/illnesses by source of injury/illness, NAICS 44411, 2005.

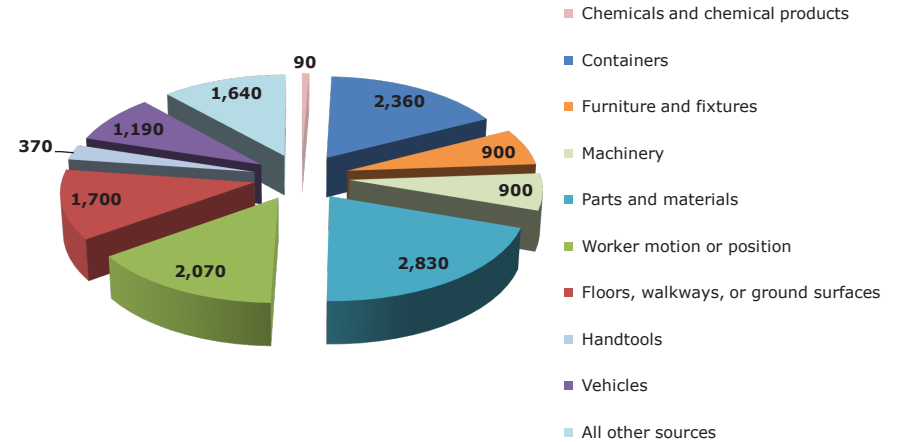


Figure 4.73. Nonfatal injuries/illnesses by event/exposure, NAICS 44411, 2005.

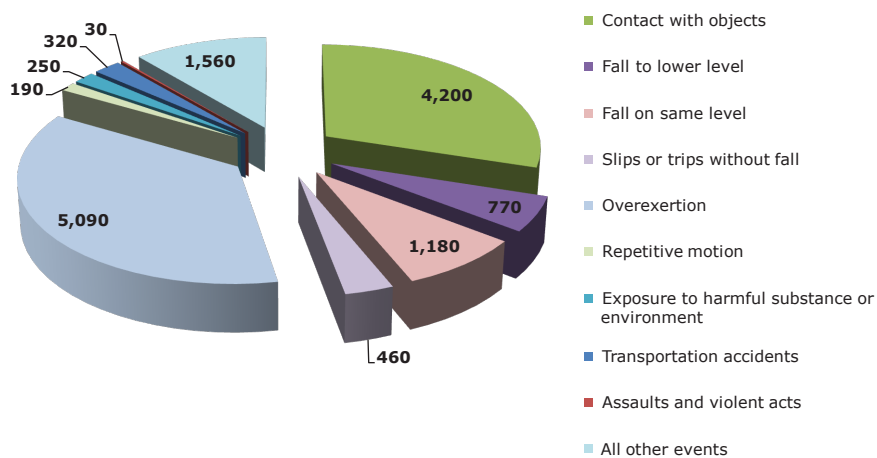
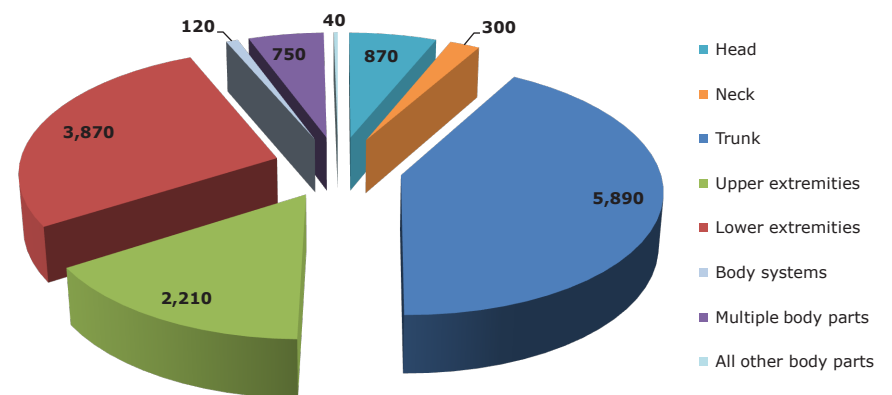


Figure 4.74. Nonfatal injuries/illnesses by part of body involved, NAICS 44411, 2005.



Warehouse clubs and superstores (NAICS 45291)

Figure 4.75. Nonfatal injuries/illnesses by age, NAICS 45291, 2005.

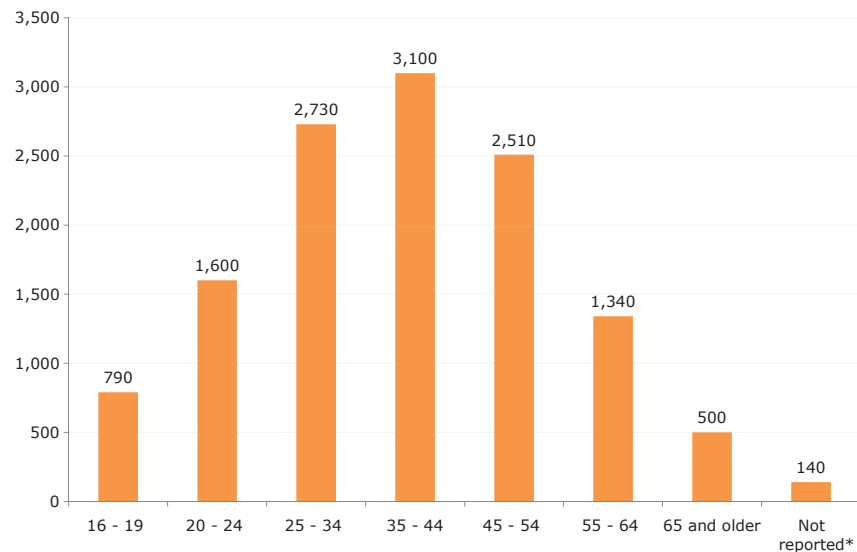


Figure 4.76. Nonfatal injuries/illnesses by gender, NAICS 45291, 2005.

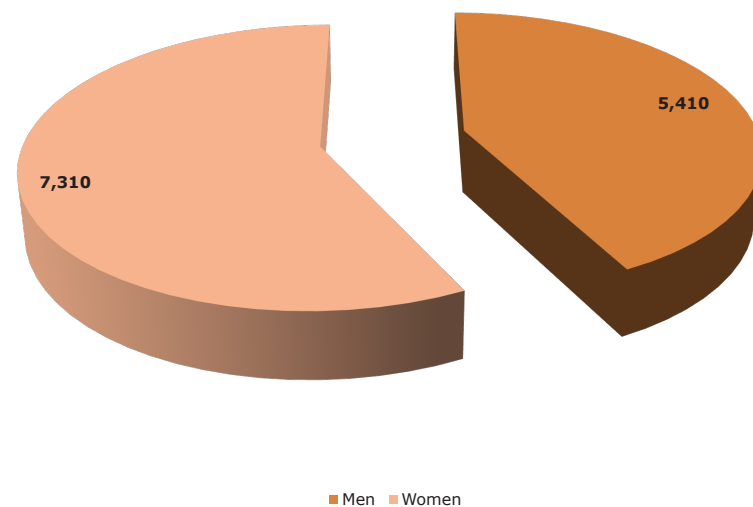


Figure 4.77. Nonfatal injuries/illnesses by race/ethnicity, NAICS 45291, 2005.

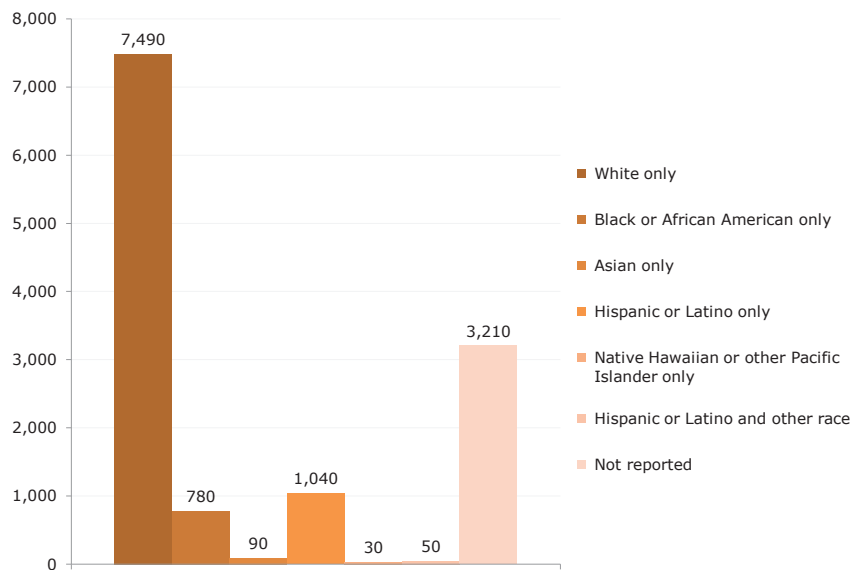
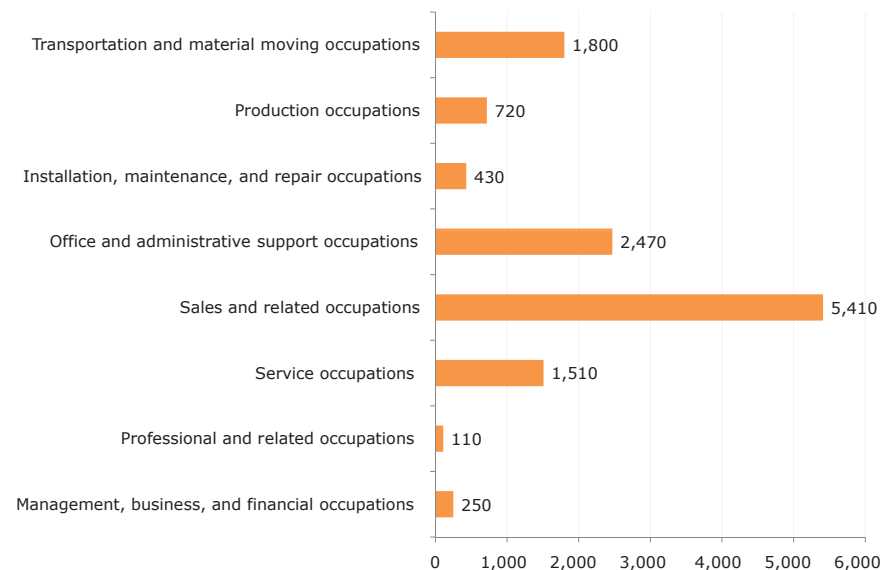


Figure 4.78. Nonfatal injuries/illnesses by occupation, NAICS 45291, 2005.



Warehouse clubs and superstores (NAICS 45291)

Figure 4.79. Nonfatal injuries/illnesses by nature of injury/illness, NAICS 45291, 2005.

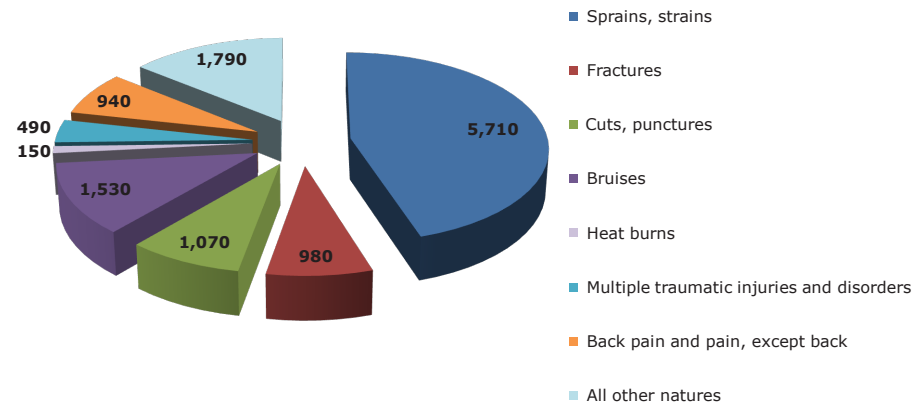


Figure 4.80. Nonfatal injuries/illnesses by source of injury/illness, NAICS 45291, 2005.

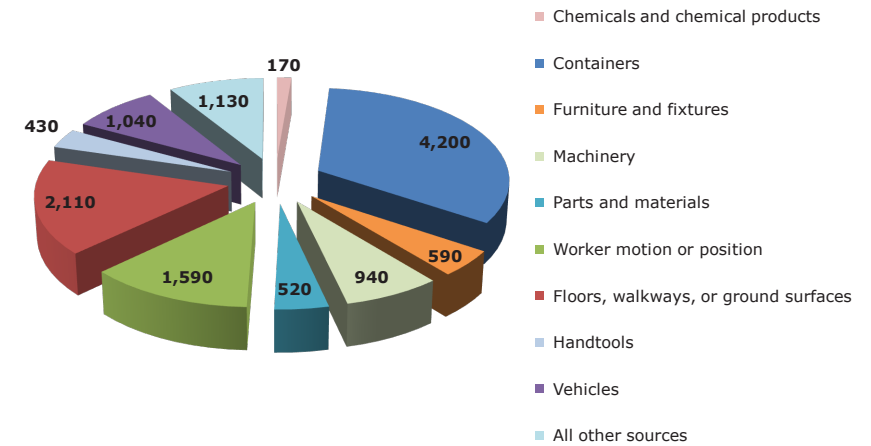


Figure 4.81. Nonfatal injuries/illnesses by event/exposure, NAICS 45291, 2005.

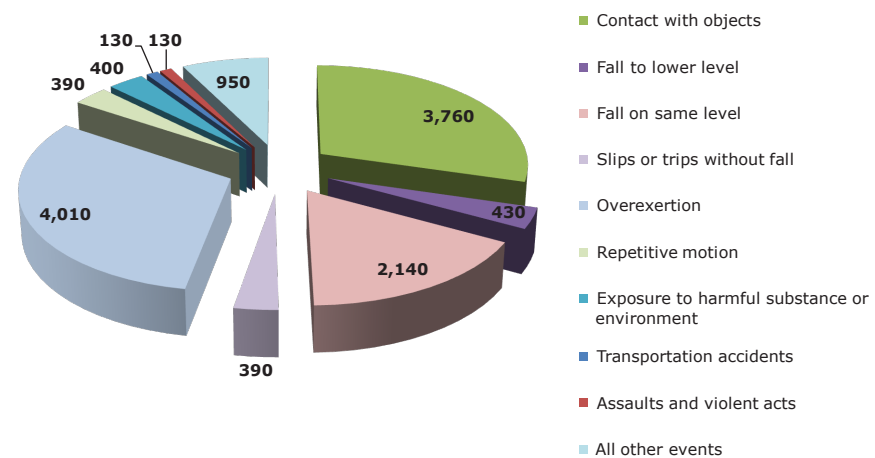
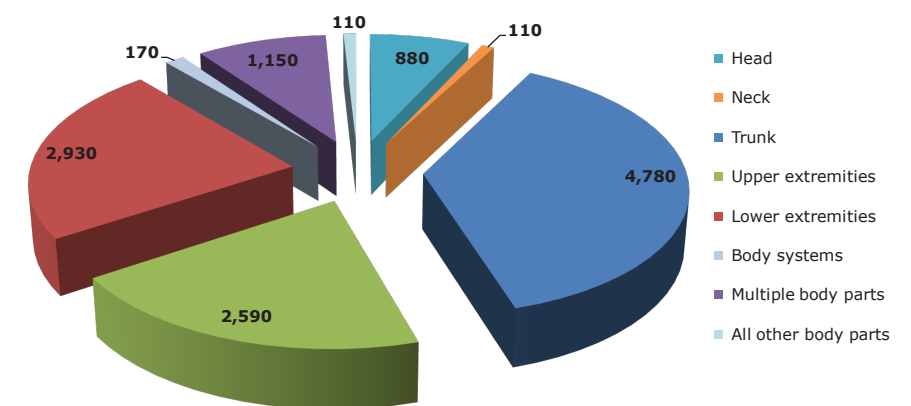


Figure 4.82. Nonfatal injuries/illnesses by part of body involved, NAICS 45291, 2005.



Other building material dealers (NAICS 44419)

Figure 4.83. Nonfatal injuries/illnesses by age, NAICS 44419, 2005.

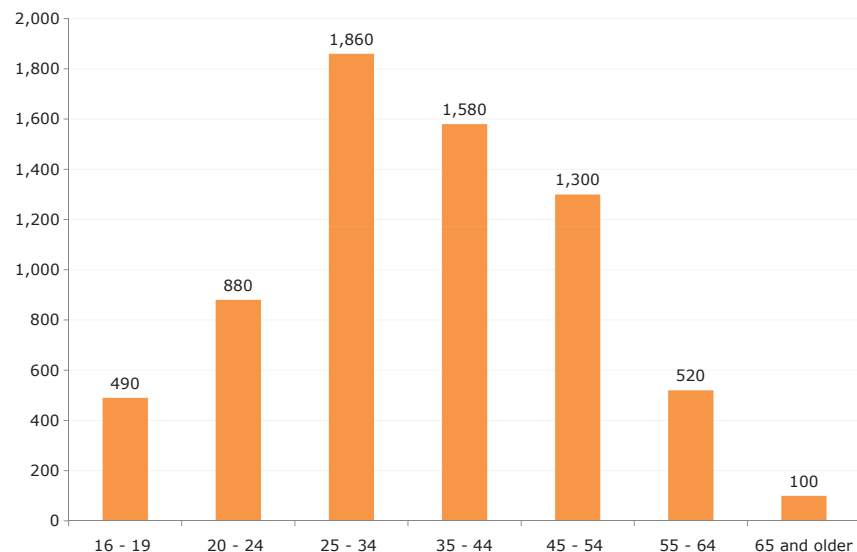


Figure 4.84. Nonfatal injuries/illnesses by gender, NAICS 44419, 2005.

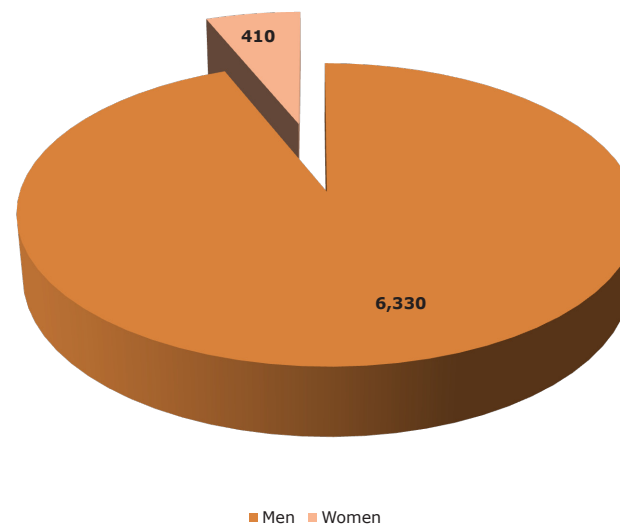


Figure 4.85. Nonfatal injuries/illnesses by race/ethnicity, NAICS 44419, 2005.

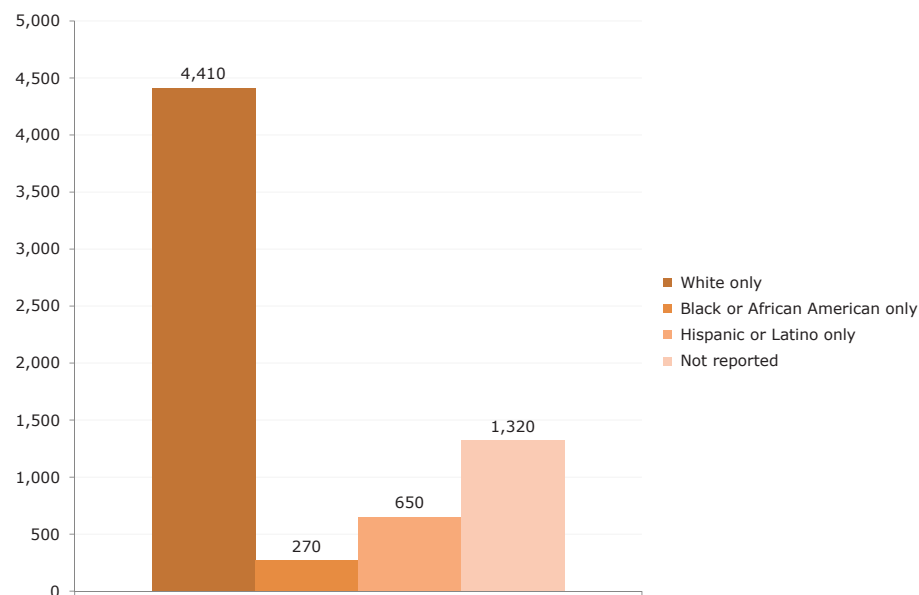
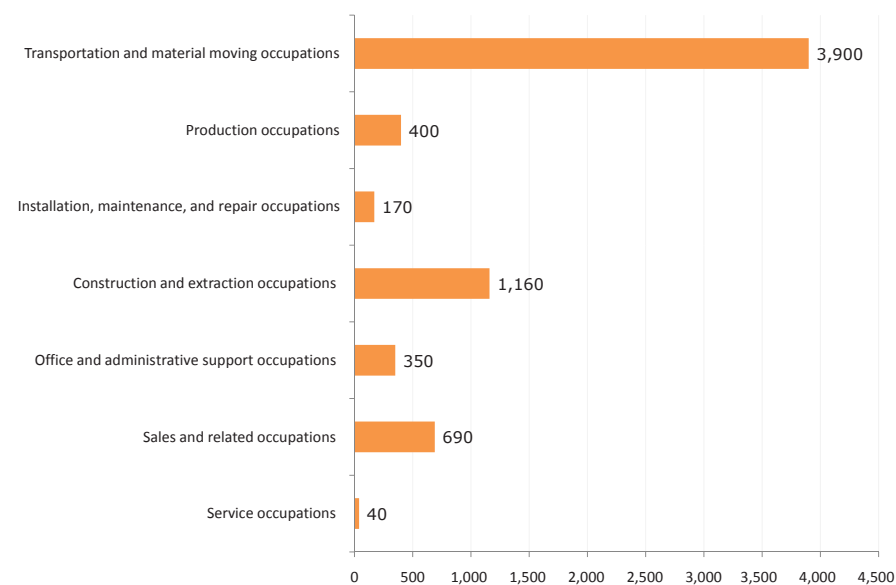


Figure 4.86. Nonfatal injuries/illnesses by occupation, NAICS 44419, 2005.



Other building material dealers (NAICS 44419)

Figure 4.87. Nonfatal injuries/illnesses by nature of injury/illness, NAICS 44419, 2005.

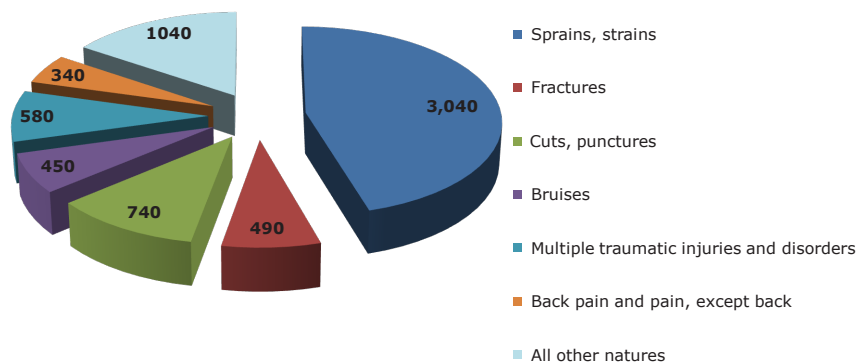


Figure 4.88. Nonfatal injuries/illnesses by source of injury/illness, NAICS 44419, 2005.

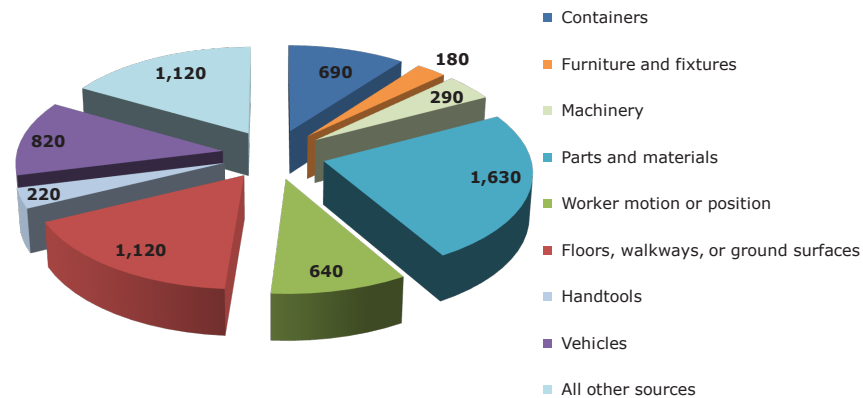


Figure 4.89. Nonfatal injuries/illnesses by event/exposure, NAICS 44419, 2005.

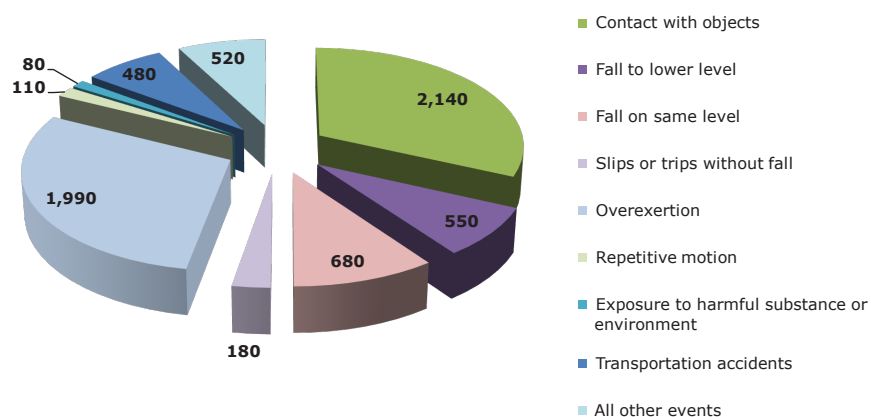
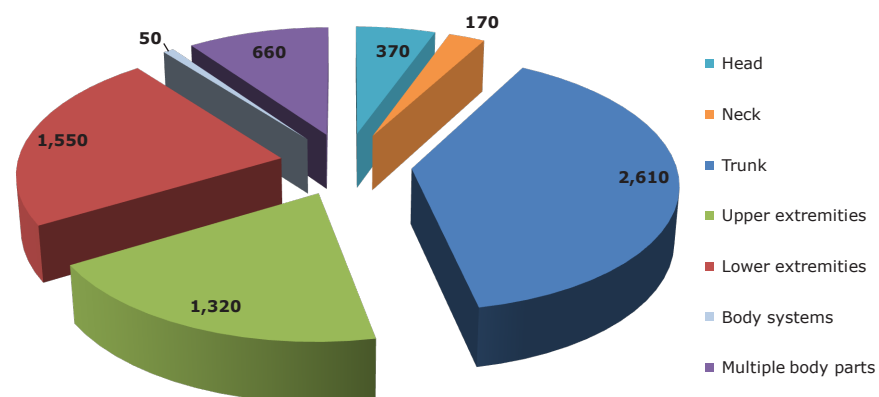


Figure 4.90. Nonfatal injuries/illnesses by part of body involved, NAICS 44419, 2005.



Tire dealers (NAICS 44132)

Figure 4.91. Nonfatal injuries/illnesses by age, NAICS 44132, 2005.

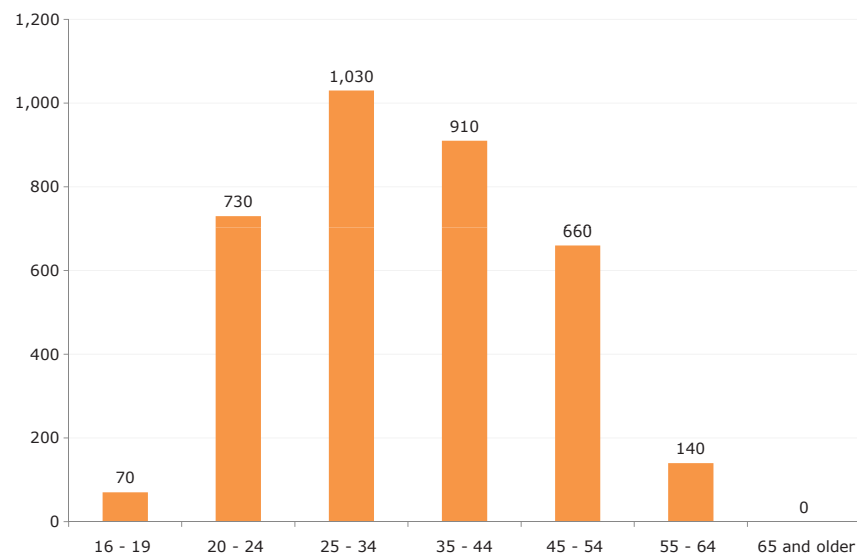


Figure 4.92. Nonfatal injuries/illnesses by gender, NAICS 44132, 2005.

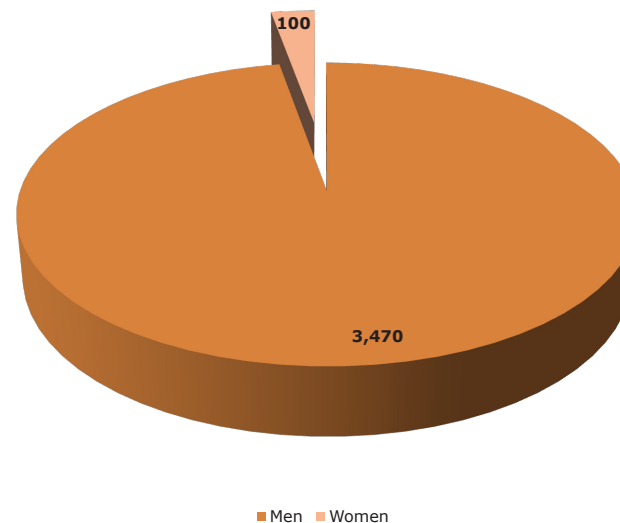


Figure 4.93. Nonfatal injuries/illnesses by race/ethnicity, NAICS 44132, 2005.

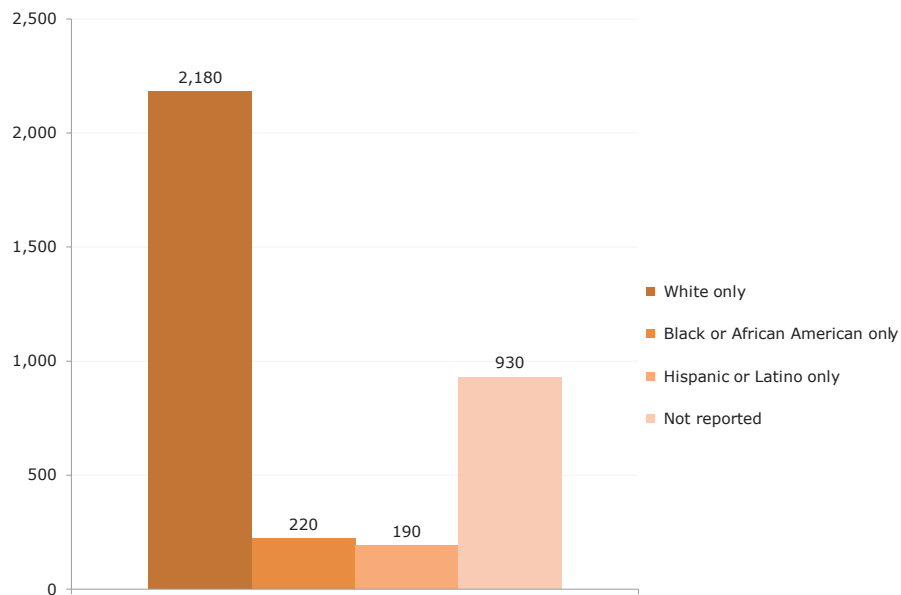
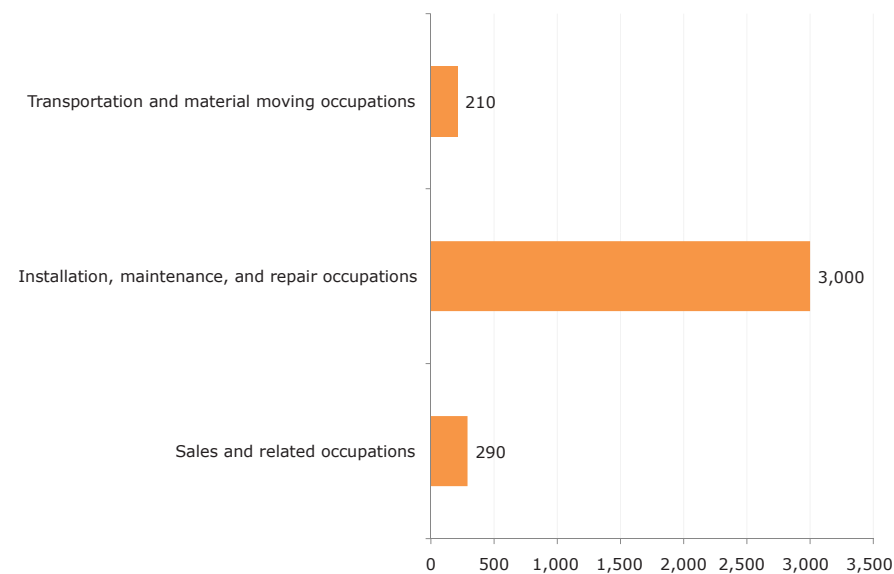


Figure 4.94. Nonfatal injuries/illnesses by occupation, NAICS 44132, 2005.



Tire dealers (NAICS 44132)

Figure 4.95. Nonfatal injuries/illnesses by nature of injury/illness, NAICS 44132, 2005.

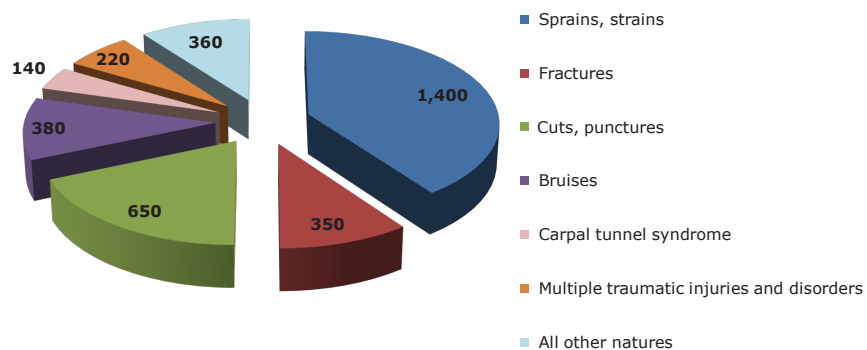


Figure 4.96. Nonfatal injuries/illnesses by source of injury/illness, NAICS 44132, 2005.

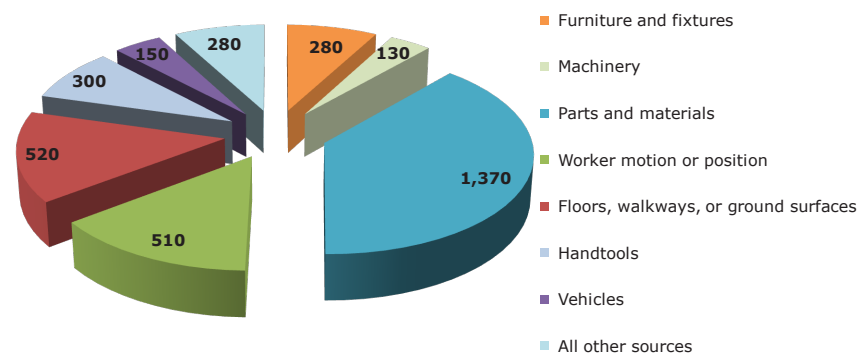


Figure 4.97. Nonfatal injuries/illnesses by event/exposure, NAICS 44132, 2005.

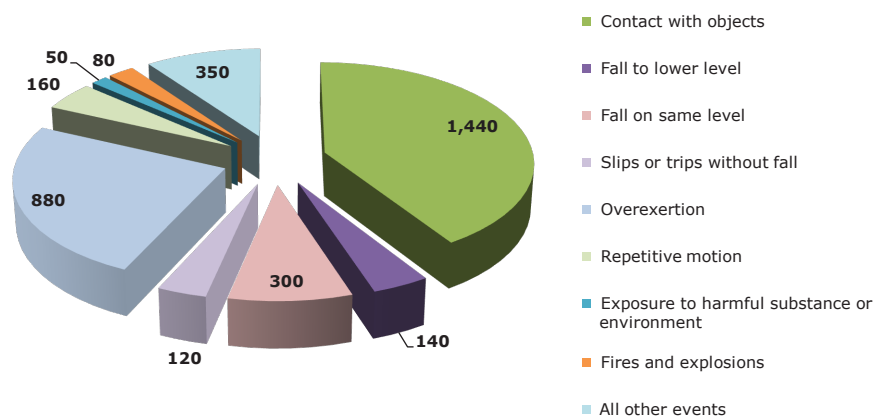
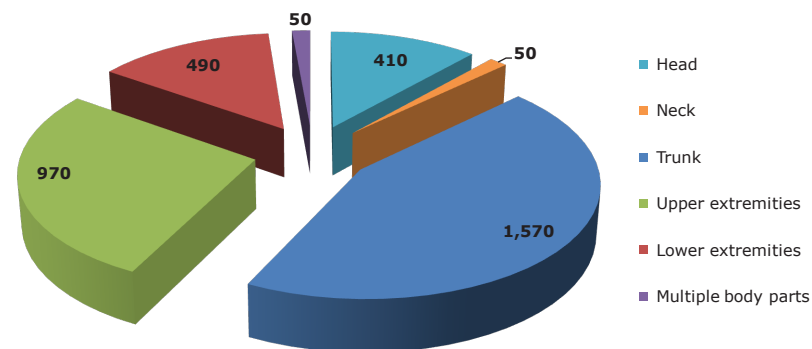


Figure 4.98. Nonfatal injuries/illnesses by part of body involved, NAICS 44132, 2005.



Supermarket and other grocery [except convenience] stores (NAICS 44511)

Figure 4.99. Nonfatal injuries/illnesses by age, NAICS 44511, 2005.

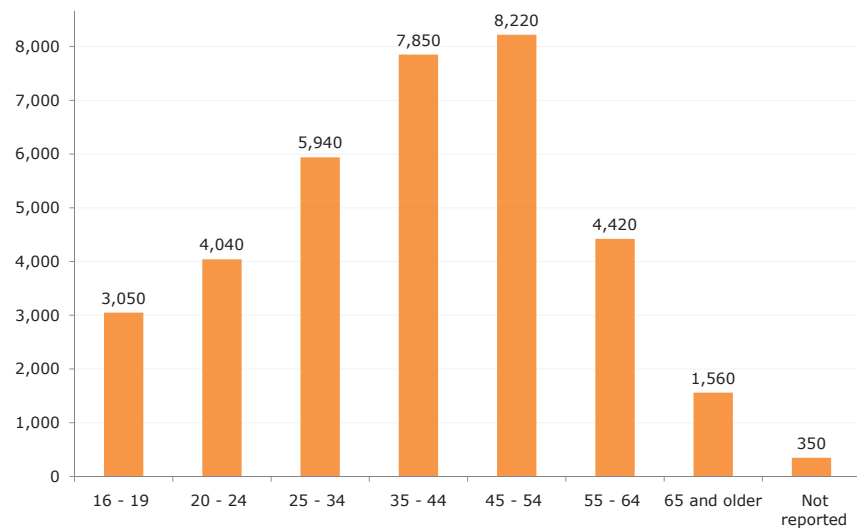


Figure 4.100. Nonfatal injuries/illnesses by gender, NAICS 44511, 2005.

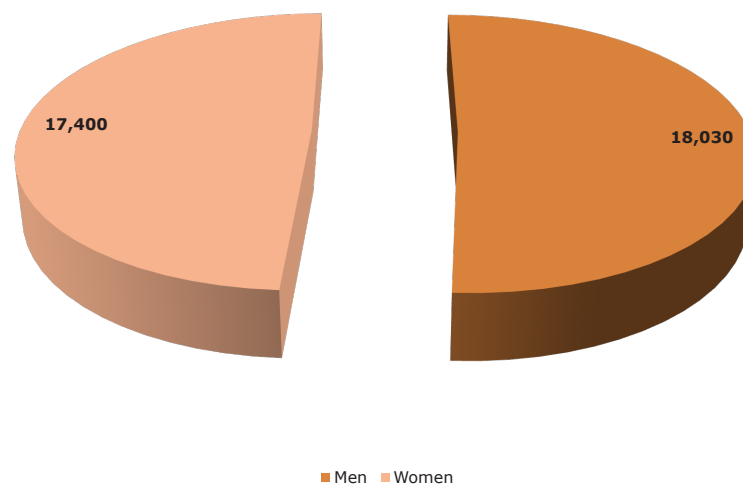


Figure 4.101. Nonfatal injuries/illnesses by race/ethnicity, NAICS 44511, 2005.

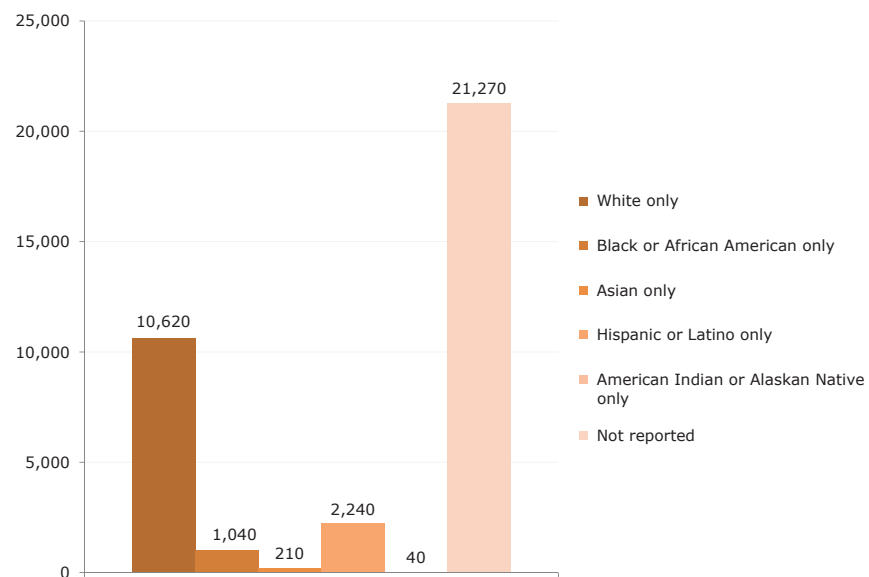
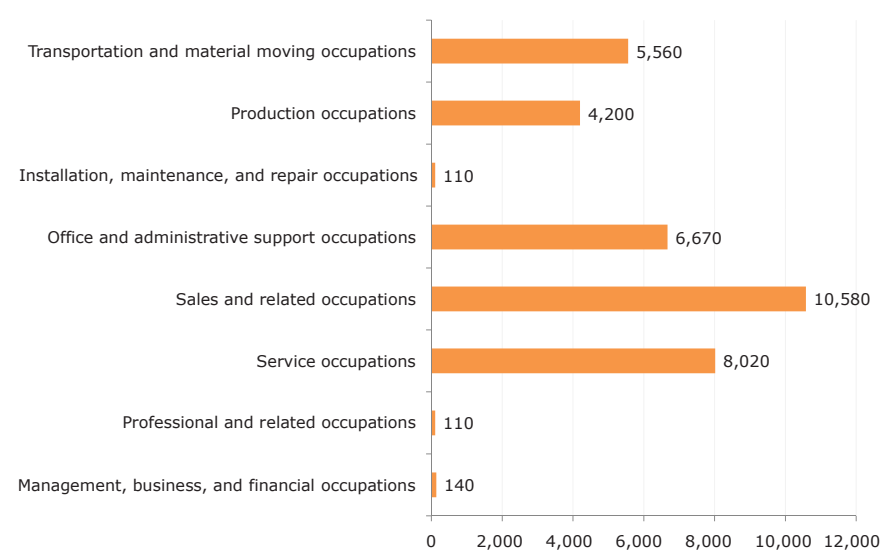


Figure 4.102. Nonfatal injuries/illnesses by occupation, NAICS 44511, 2005.



Supermarket and other grocery [except convenience] stores (NAICS 44511)

Figure 4.103. Nonfatal injuries/illnesses by nature of injury/illness, NAICS 44511, 2005.

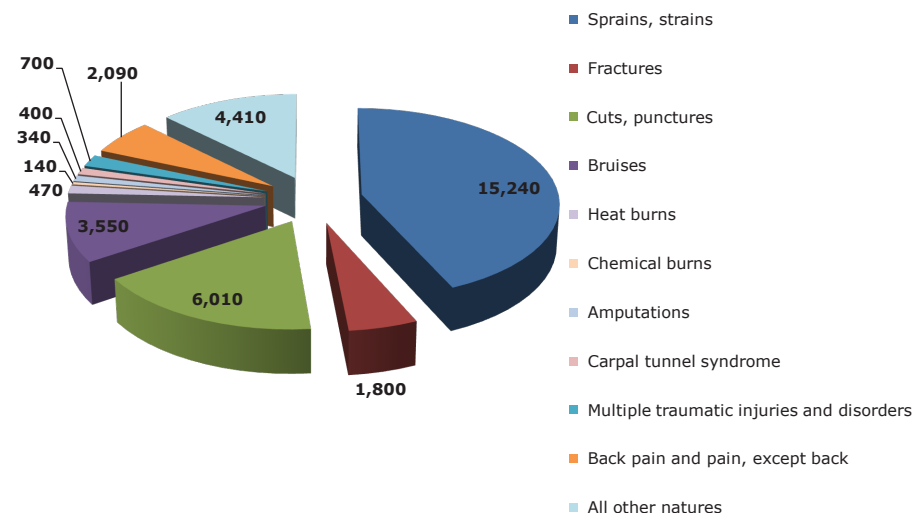


Figure 4.104. Nonfatal injuries/illnesses by source of injury/illness, NAICS 44511, 2005.

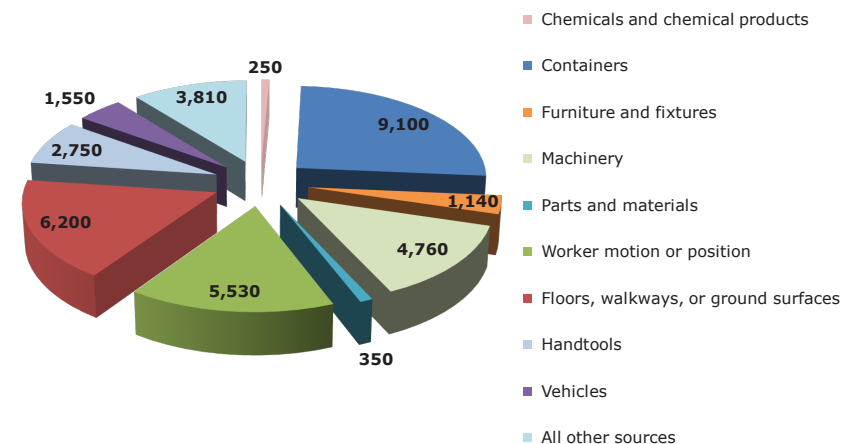


Figure 4.105. Nonfatal injuries/illnesses by event/exposure, NAICS 44511, 2005.

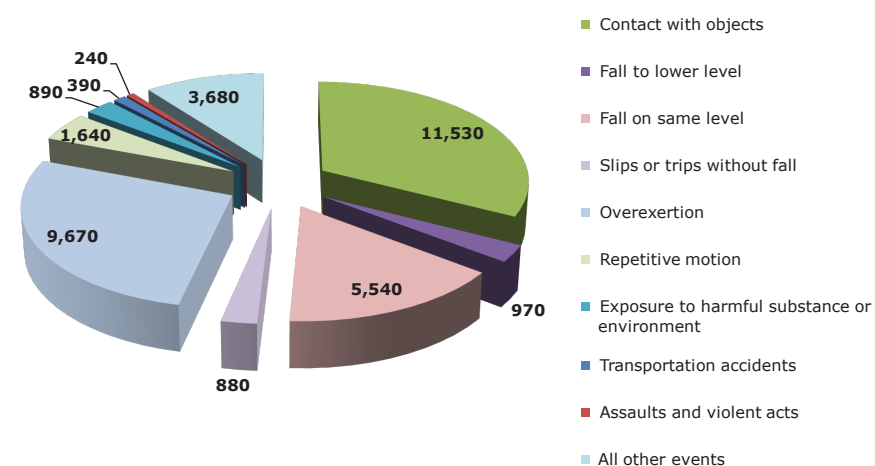
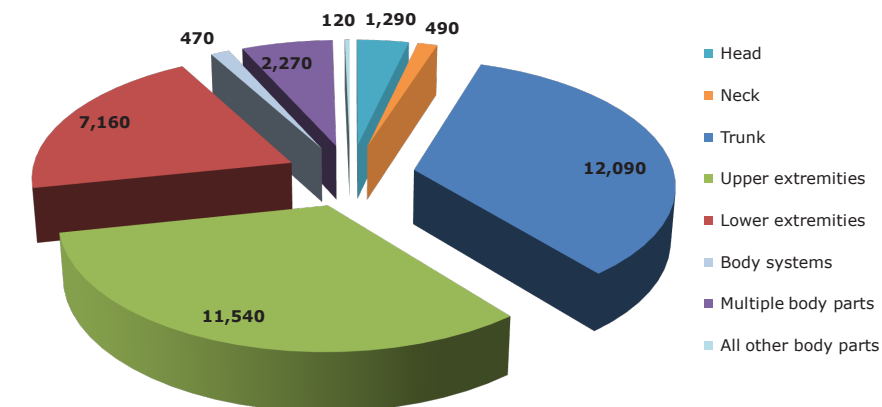


Figure 4.106. Nonfatal injuries/illnesses by part of body involved, NAICS 44511, 2005.



Hobby, toy, and game stores (NAICS 45112)

Figure 4.107. Nonfatal injuries/illnesses by age, NAICS 45112, 2005.

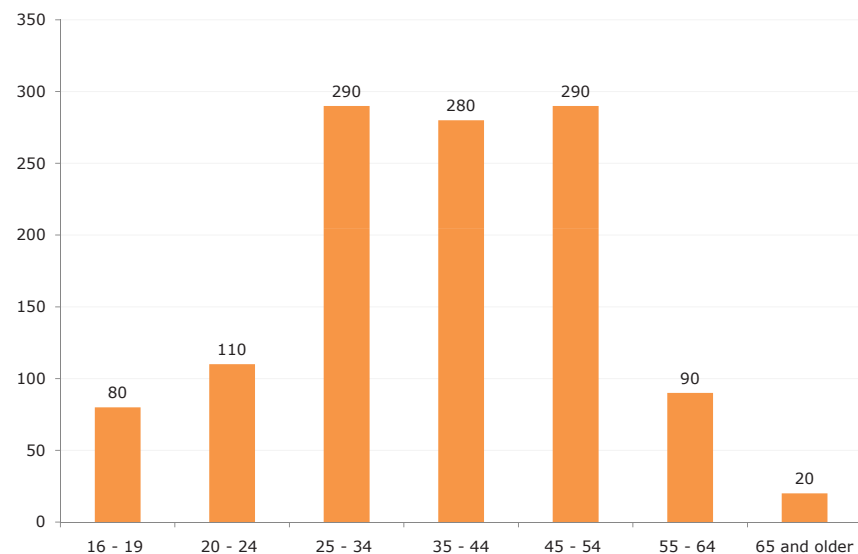


Figure 4.108. Nonfatal injuries/illnesses by gender, NAICS 45112, 2005.

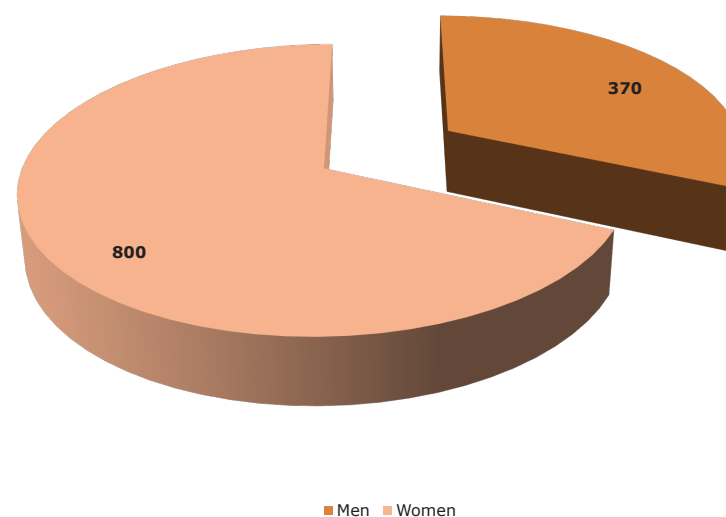


Figure 4.109. Nonfatal injuries/illnesses by race/ethnicity, NAICS 45112, 2005.

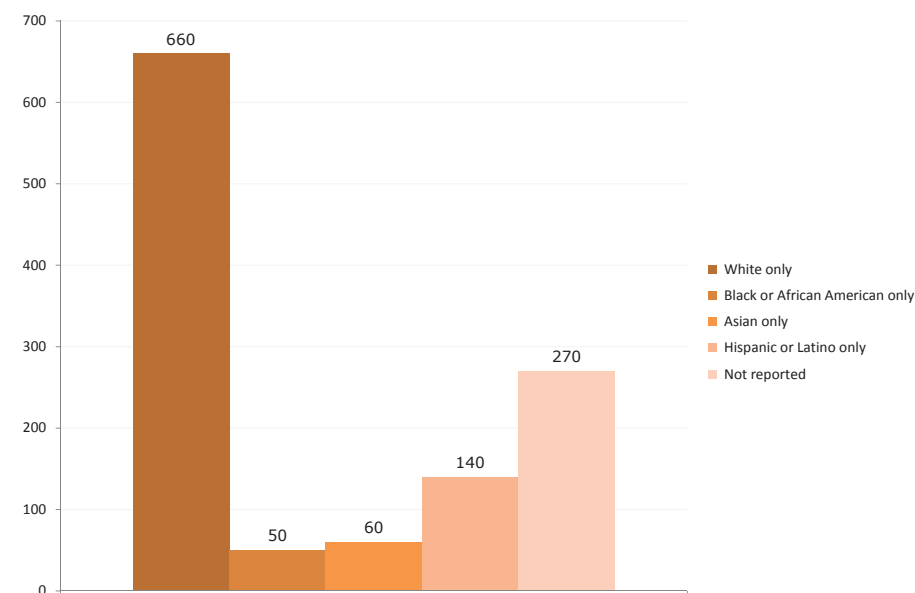
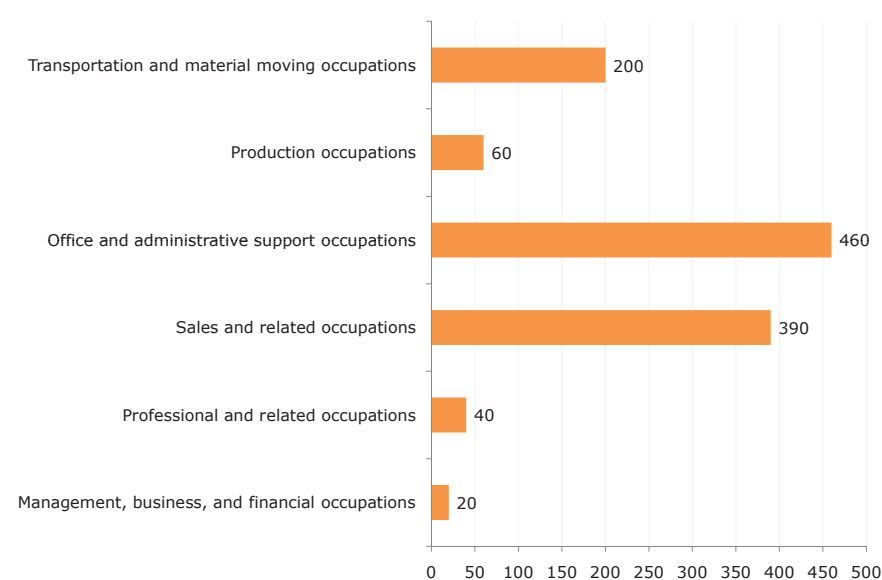


Figure 4.110. Nonfatal injuries/illnesses by occupation, NAICS 45112, 2005.



Hobby, toy, and game stores (NAICS 45112)

Figure 4.111. Nonfatal injuries/illnesses by nature of injury/illness, NAICS 45112, 2005.

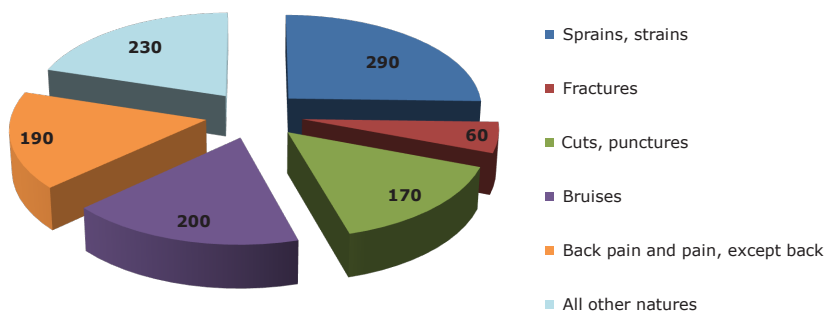


Figure 4.112. Nonfatal injuries/illnesses by source of injury/illness, NAICS 45112, 2005.

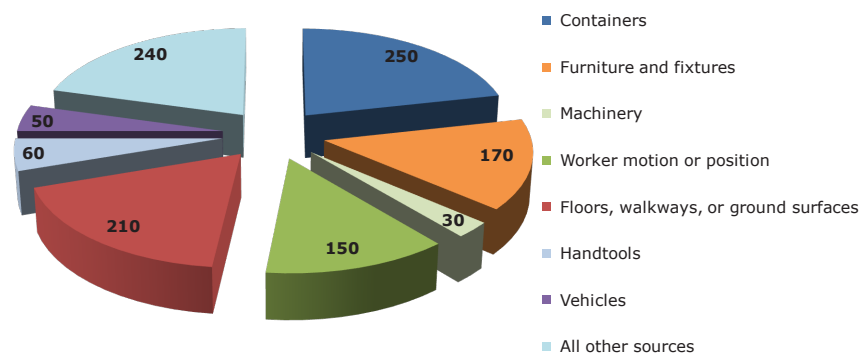


Figure 4.113. Nonfatal injuries/illnesses by event/exposure, NAICS 45112, 2005.

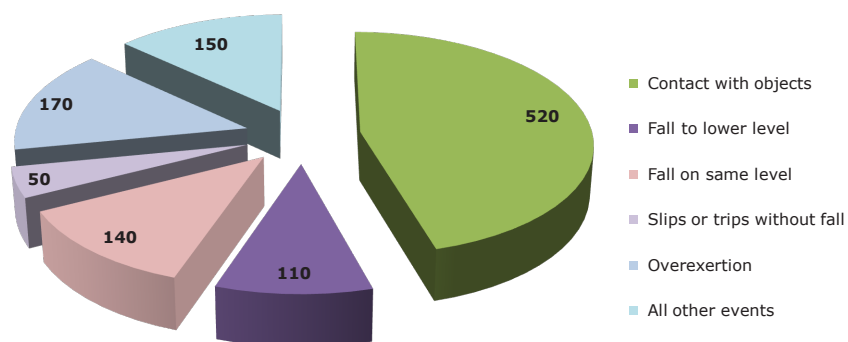
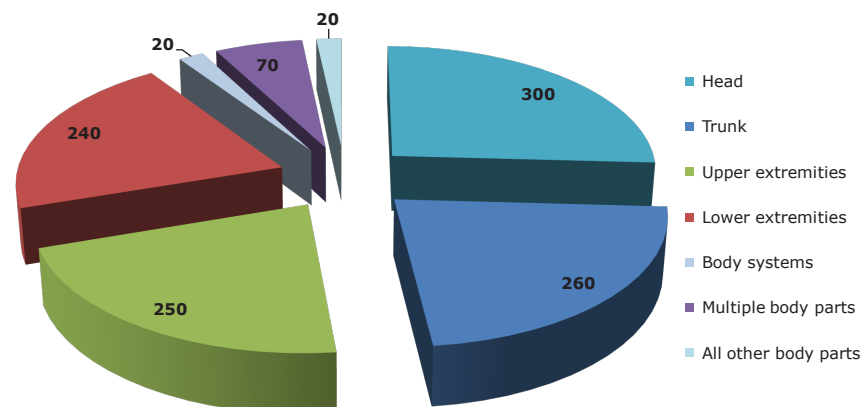


Figure 4.114. Nonfatal injuries/illnesses by part of body involved, NAICS 45112, 2005.



New car dealers (NAICS 44111)

Figure 4.115. Nonfatal injuries/illnesses by age, NAICS 44111, 2005.

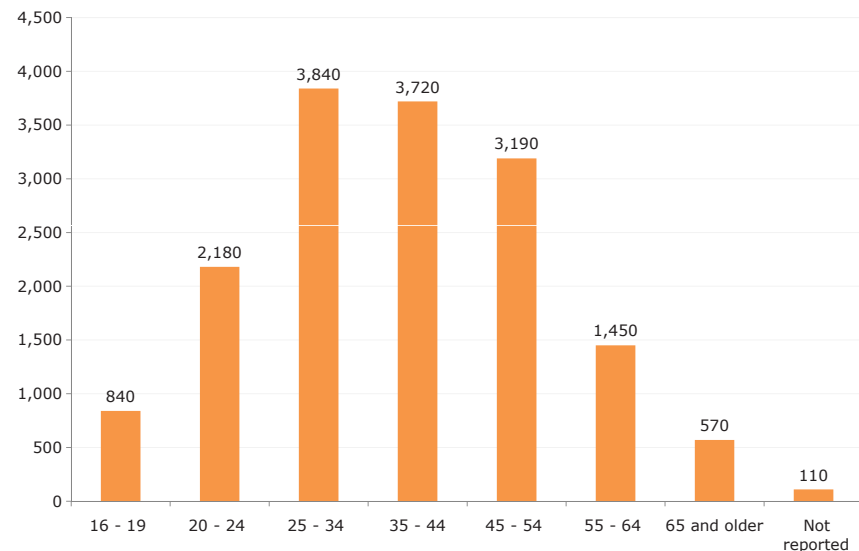


Figure 4.116. Nonfatal injuries/illnesses by gender, NAICS 44111, 2005.

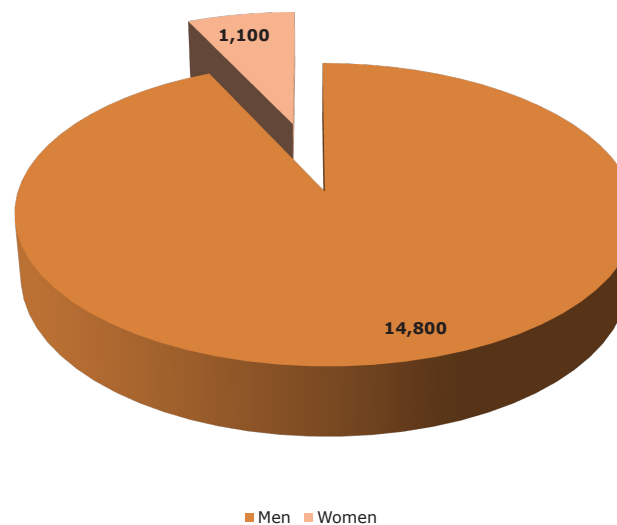


Figure 4.117. Nonfatal injuries/illnesses by race/ethnicity, NAICS 44111, 2005.

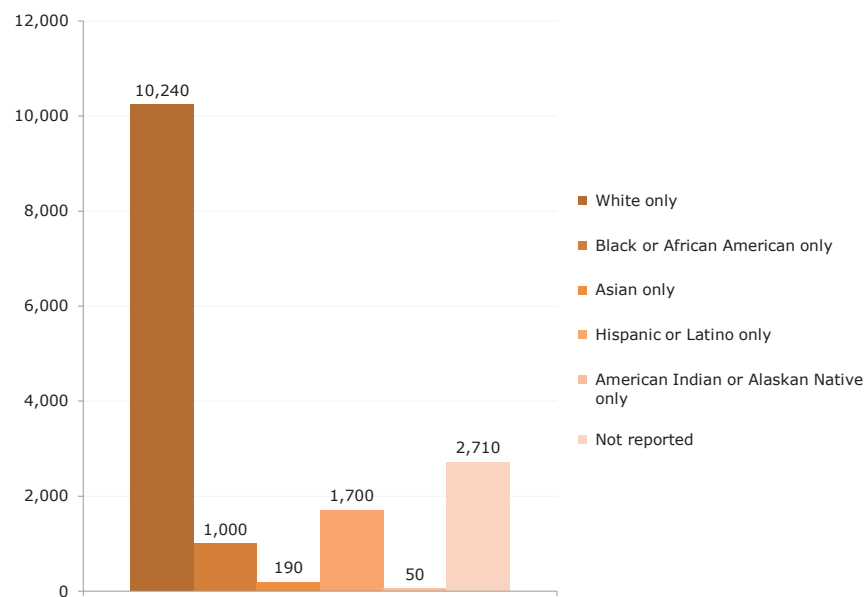
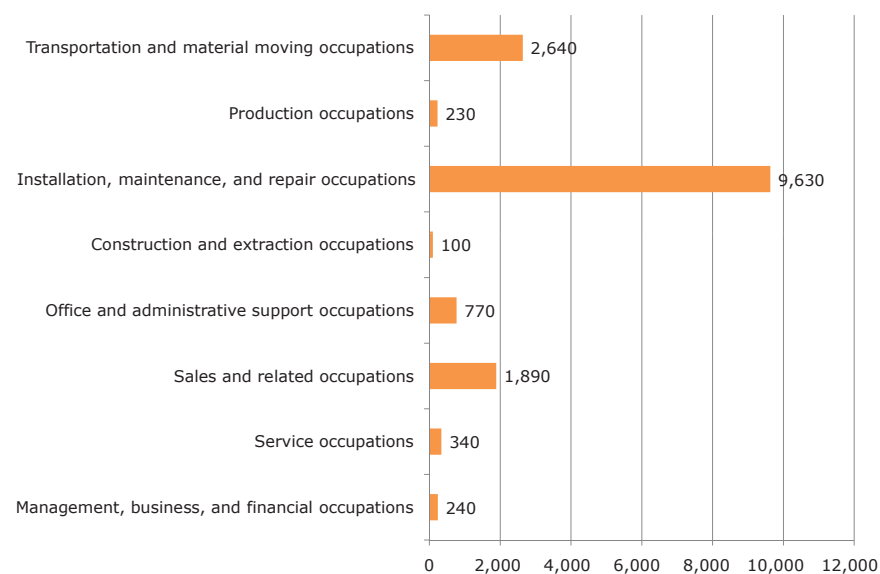


Figure 4.118. Nonfatal injuries/illnesses by occupation, NAICS 44111, 2005.



New car dealers (NAICS 44111)

Figure 4.119. Nonfatal injuries/illnesses by nature of injury/illness, NAICS 44111, 2005.

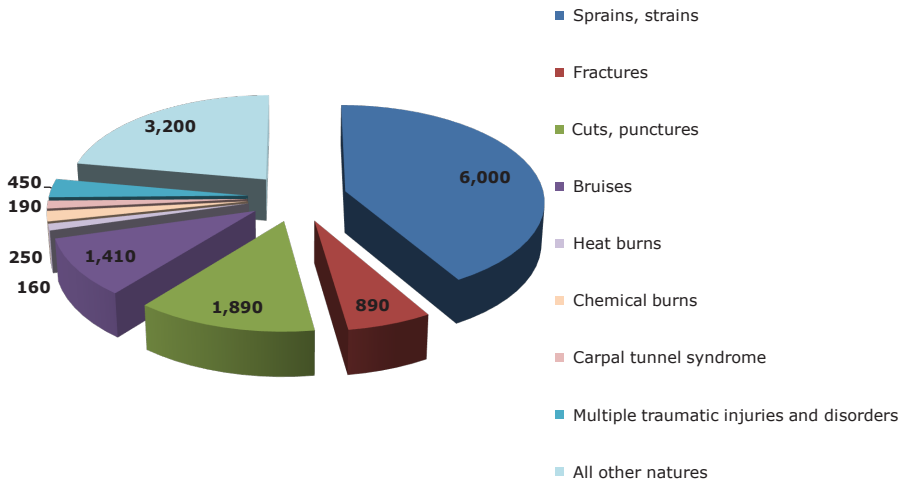


Figure 4.120. Nonfatal injuries/illnesses by source of injury/illness, NAICS 44111, 2005.

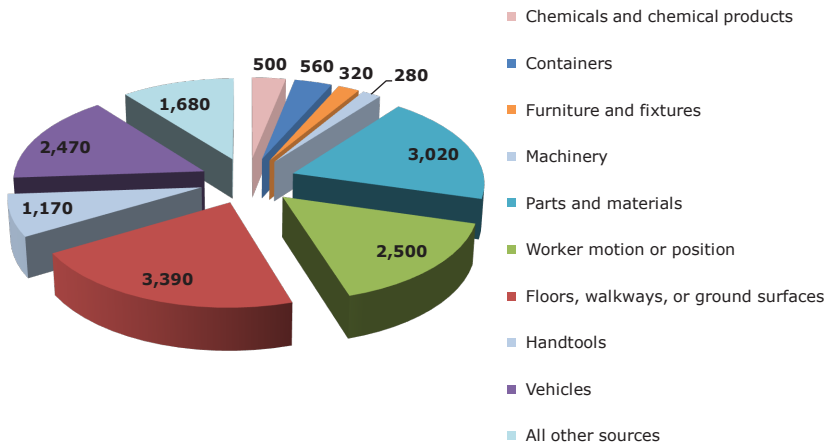


Figure 4.121. Nonfatal injuries/illnesses by event/exposure, NAICS 44111, 2005.

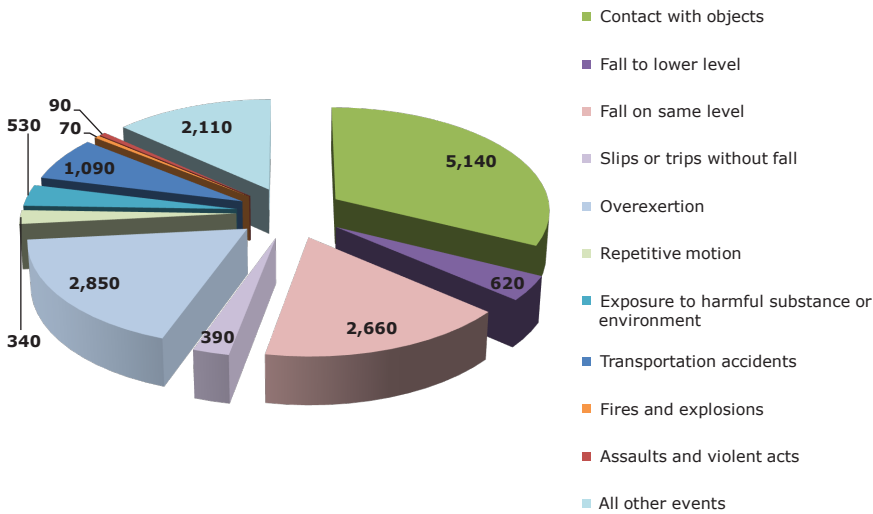
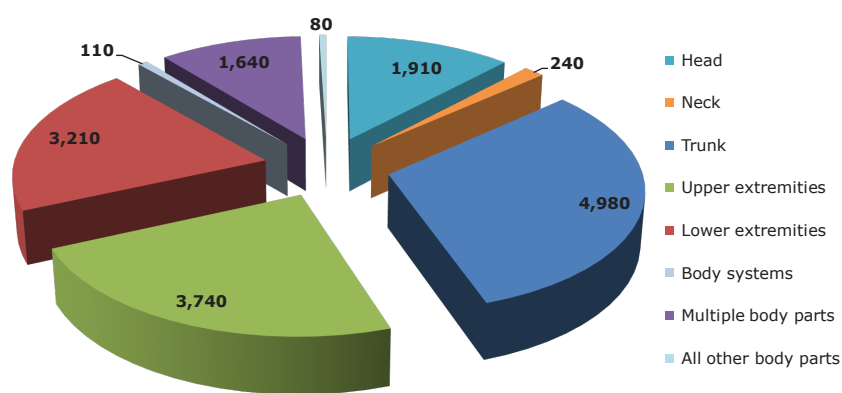


Figure 4.122. Nonfatal injuries/illnesses by part of body involved, NAICS 44111, 2005.



Department stores (NAICS 4521)

Figure 4.123. Nonfatal injuries/illnesses by age, NAICS 4521, 2005.

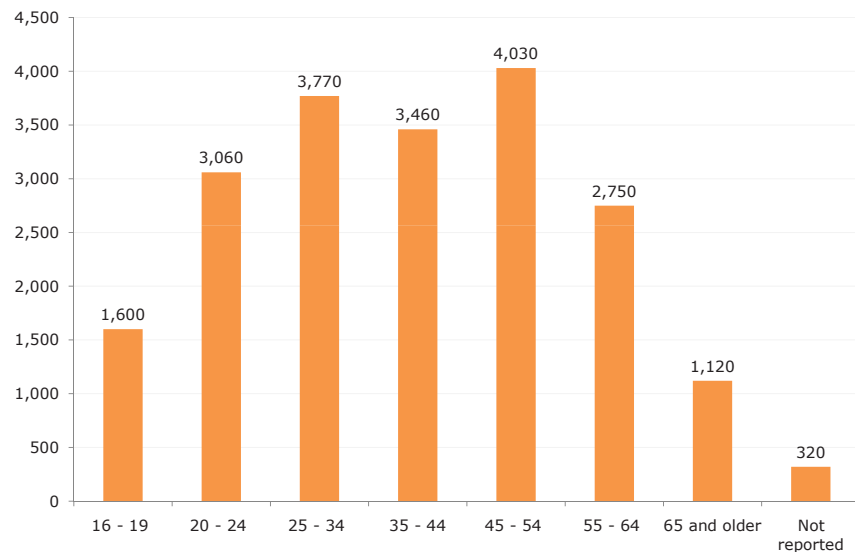


Figure 4.124. Nonfatal injuries/illnesses by gender, NAICS 4521, 2005.

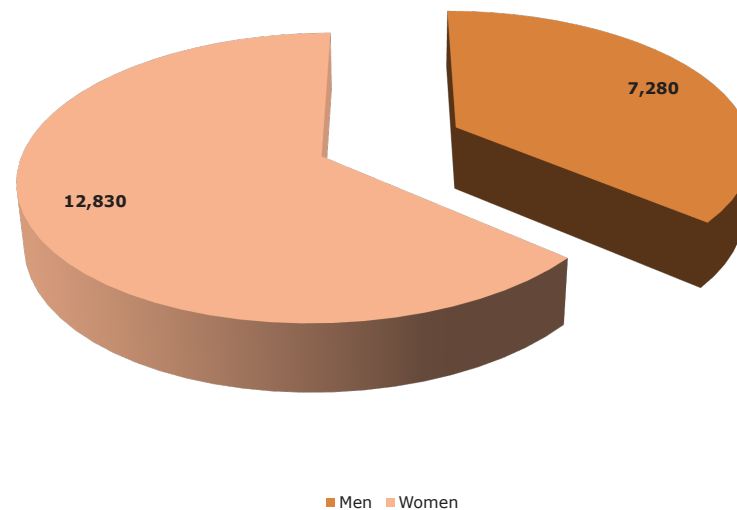


Figure 4.125. Nonfatal injuries/illnesses by race/ethnicity, NAICS 4521, 2005.

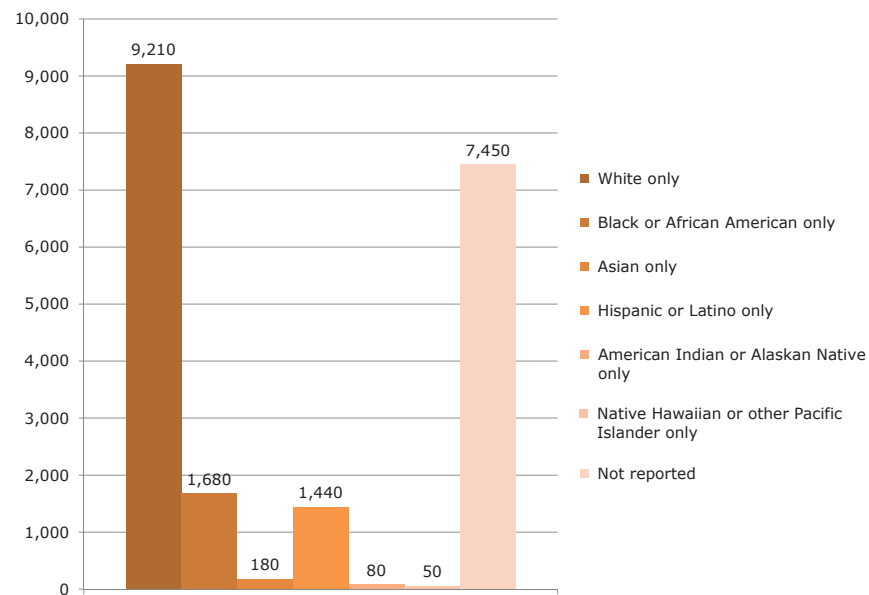
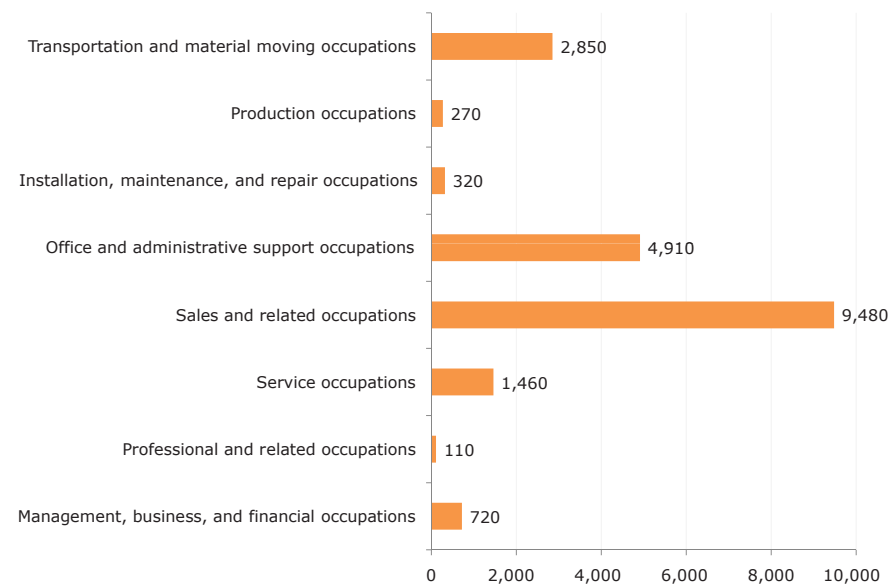


Figure 4.126. Nonfatal injuries/illnesses by occupation, NAICS 4521, 2005.



Department stores (NAICS 4521)

Figure 4.127. Nonfatal injuries/illnesses by nature of injury/illness, NAICS 4521, 2005.

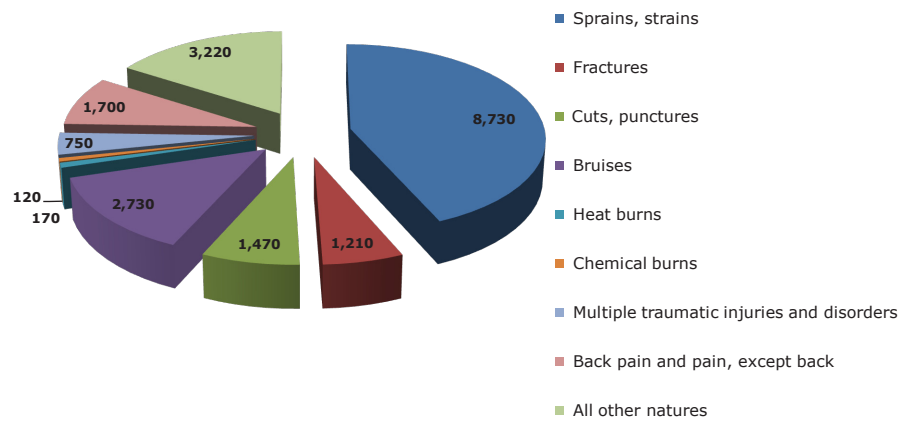


Figure 4.128. Nonfatal injuries/illnesses by source of injury/illness, NAICS 4521, 2005.

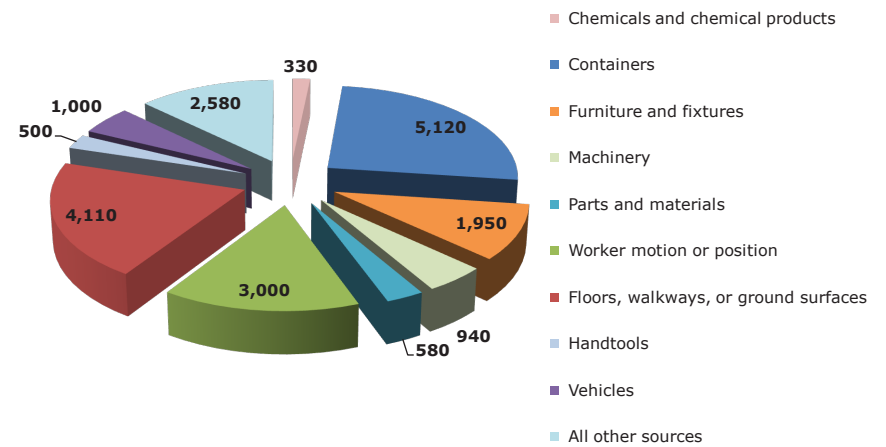


Figure 4.129. Nonfatal injuries/illnesses by event/exposure, NAICS 4521, 2005.

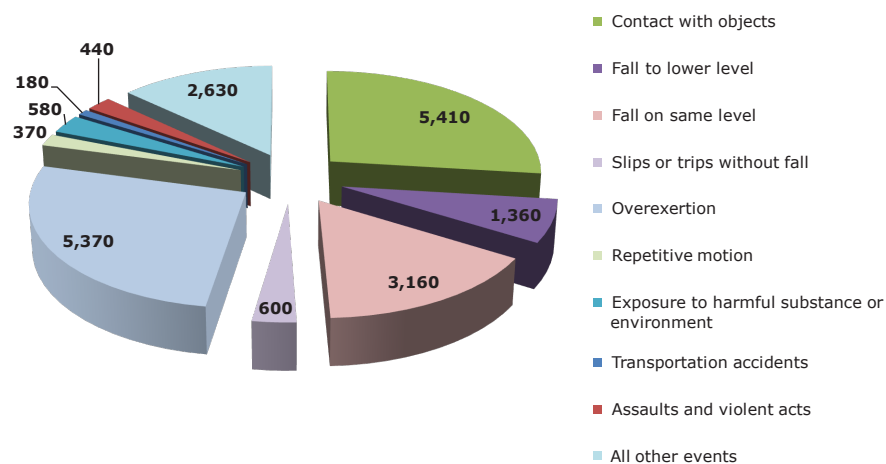
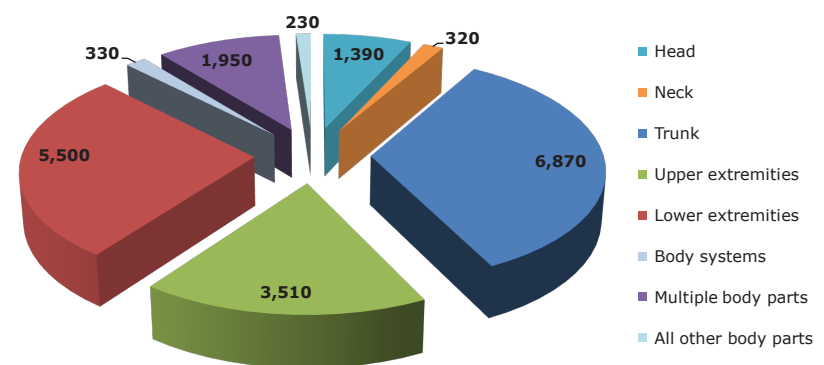


Figure 4.130. Nonfatal injuries/illnesses by part of body involved, NAICS 4521, 2005.



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Appendix

Wholesale and Retail Trade Subsectors by NAICS Code

Appendix: Wholesale and Retail Trade Subsectors by NAICS Code

42 Wholesale Trade

423 Merchant Wholesalers, Durable Goods

4231 Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers

42311 Automobile and Other Motor Vehicle Merchant Wholesalers

423110 Automobile and Other Motor Vehicle Merchant Wholesalers

42312 Motor Vehicle Supplies and New Parts Merchant Wholesalers

423120 Motor Vehicle Supplies and New Parts Merchant Wholesalers

42313 Tire and Tube Merchant Wholesalers

423130 Tire and Tube Merchant Wholesalers

42314 Motor Vehicle Parts (Used) Merchant Wholesalers

423140 Motor Vehicle Parts (Used) Merchant Wholesalers

4232 Furniture and Home Furnishing Merchant Wholesalers

42321 Furniture Merchant Wholesalers

423210 Furniture Merchant Wholesalers

42322 Home Furnishing Merchant Wholesalers

423220 Home Furnishing Merchant Wholesalers

4233 Lumber and Other Construction Materials Merchant Wholesalers

42331 Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers

423310 Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers

42332 Brick, Stone, and Related Construction Material Merchant Wholesalers

423320 Brick, Stone, and Related Construction Material Merchant Wholesalers

42333 Roofing, Siding, and Insulation Material Merchant Wholesalers

423330 Roofing, Siding, and Insulation Material Merchant Wholesalers

42339 Other Construction Material Merchant Wholesalers

423390 Other Construction Material Merchant Wholesalers

4234 Professional and Commercial Equipment and Supplies Merchant Wholesalers

42341 Photographic Equipment and Supplies Merchant Wholesalers

423410 Photographic Equipment and Supplies Merchant Wholesalers

42342 Office Equipment Merchant Wholesalers

423420 Office Equipment Merchant Wholesalers

42343 Computer and Computer Peripheral Equipment and Software Merchant Wholesalers

423430 Computer and Computer Peripheral Equipment and Software Merchant Wholesalers

42344 Other Commercial Equipment Merchant Wholesalers

423440 Other Commercial Equipment Merchant Wholesalers

42345 Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers

423450 Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers

42346 Ophthalmic Goods Merchant Wholesalers

423460 Ophthalmic Goods Merchant Wholesalers

42349 Other Professional Equipment and Supplies Merchant Wholesalers

423490 Other Professional Equipment and Supplies Merchant Wholesalers

4235 Metal and Mineral (Except Petroleum) Merchant Wholesalers

42351 Metal Service Centers and Other Metal Merchant Wholesalers

423510 Metal Service Centers and Other Metal Merchant Wholesalers

42352 Coal and Other Mineral and Ore Merchant Wholesalers

423520 Coal and Other Mineral and Ore Merchant Wholesalers

4236 Electrical and Electronic Goods Merchant Wholesalers

42361 Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers

423610 Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers

42362 Electrical and Electronic Appliance, Television, and Radio Set Merchant Wholesalers

423620 Electrical and Electronic Appliance, Television, and Radio Set Merchant Wholesalers

42369 Other Electronic Parts and Equipment Merchant Wholesalers

423690 Other Electronic Parts and Equipment Merchant Wholesalers

4237 Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers

42371 Hardware Merchant Wholesalers

423710 Hardware Merchant Wholesalers

42372 Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers

423720 Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers

42373 Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers

423730 Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers

42374 Refrigeration Equipment and Supplies Merchant Wholesalers

423740 Refrigeration Equipment and Supplies Merchant Wholesalers

4238 Machinery, Equipment, and Supplies Merchant Wholesalers

42381 Construction and Mining (Except Oil Well) Machinery and Equipment Merchant Wholesalers

423810 Construction and Mining (Except Oil Well) Machinery and Equipment Merchant Wholesalers

42382 Farm and Garden Machinery and Equipment Merchant Wholesalers

423820 Farm and Garden Machinery and Equipment Merchant Wholesalers

42383 Industrial Machinery and Equipment Merchant Wholesalers

423830 Industrial Machinery and Equipment Merchant Wholesalers

42384 Industrial Supplies Merchant Wholesalers

423840 Industrial Supplies Merchant Wholesalers

42385 Service Establishment Equipment and Supplies Merchant Wholesalers

423850 Service Establishment Equipment and Supplies Merchant Wholesalers

42386 Transportation Equipment and Supplies (Except Motor Vehicle) Merchant Wholesalers

423860 Transportation Equipment and Supplies (Except Motor Vehicle) Merchant Wholesalers

4239 Miscellaneous Durable Goods Merchant Wholesalers

42391 Sporting and Recreational Goods and Supplies Merchant Wholesalers

423910 Sporting and Recreational Goods and Supplies Merchant Wholesalers

42392 Toy and Hobby Goods and Supplies Merchant Wholesalers

423920 Toy and Hobby Goods and Supplies Merchant Wholesalers

42393 Recyclable Material Merchant Wholesalers

423930 Recyclable Material Merchant Wholesalers

42394 Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers

423940 Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers

42399 Other Miscellaneous Durable
Goods Merchant Wholesalers

423990 Other Miscellaneous Durable
Goods Merchant Wholesalers

424 Merchant Wholesalers, Nondurable Goods

4241 Paper and Paper Product Merchant Wholesalers

42411 Printing and Writing Paper
Merchant Wholesalers

424110 Printing and Writing Paper
Merchant Wholesalers

42412 Stationery and Office Supplies
Merchant Wholesalers

424120 Stationery and Office Supplies
Merchant Wholesalers

42413 Industrial and Personal Service
Paper Merchant Wholesalers

424130 Industrial and Personal Service
Paper Merchant Wholesalers

4242 Drugs and Druggists Sundries Merchant Wholesalers

42421 Drugs and Druggists Sundries
Merchant Wholesalers

424210 Drugs and Druggists Sundries
Merchant Wholesalers

4243 Apparel, Piece Goods, and Notions Merchant Wholesalers

42431 Piece Goods, Notions, and Other
Dry Goods Merchant Wholesalers

424310 Piece Goods, Notions, and Other
Dry Goods Merchant Wholesalers

42432 Mens' and Boys' Clothing and
Furnishings Merchant Wholesalers

424320 Mens' and Boys' Clothing and
Furnishings Merchant Wholesalers

42433 Womens', Children's, and Infants'
Clothing and Accessories Merchant
Wholesalers

424330 Womens', Children's, and Infants'
Clothing and Accessories Merchant
Wholesalers

42434 Footwear Merchant Wholesalers

424340 Footwear Merchant Wholesalers

4244 Grocery and Related Product Merchant Wholesalers

42441 General Line Grocery Merchant
Wholesalers

424410 General Line Grocery Merchant
Wholesalers

42442 Packaged Frozen Food Merchant
Wholesalers

424420 Packaged Frozen Food Merchant
Wholesalers

42443 Dairy Product (Except Dried or
Canned) Merchant Wholesalers

424430 Dairy Product (Except Dried or
Canned) Merchant Wholesalers

42444 Poultry and Poultry Product
Merchant Wholesalers

424440 Poultry and Poultry Product
Merchant Wholesalers

42445 Confectionery Merchant
Wholesalers

424450 Confectionery Merchant
Wholesalers

42446 Fish and Seafood Merchant
Wholesalers

424460 Fish and Seafood Merchant
Wholesalers

42447 Meat and Meat Product Merchant
Wholesalers

424470 Meat and Meat Product Merchant
Wholesalers

42448 Fresh Fruit and Vegetable
Merchant Wholesalers

424480 Fresh Fruit and Vegetable
Merchant Wholesalers

42449 Other Grocery and Related
Products Merchant Wholesalers

424490 Other Grocery and Related
Products Merchant Wholesalers

4245 Farm Product Raw Material Merchant Wholesalers

42451 Grain and Field Bean Merchant
Wholesalers

424510 Grain and Field Bean Merchant
Wholesalers

42452 Livestock Merchant Wholesalers
424520 Livestock Merchant Wholesalers
42459 Other Farm Product Raw Material Merchant Wholesalers
424590 Other Farm Product Raw Material Merchant Wholesalers

4246 Chemical and Allied Products Merchant Wholesalers

42461 Plastics Materials and Basic Forms and Shapes Merchant Wholesalers
424610 Plastics Materials and Basic Forms and Shapes Merchant Wholesalers
42469 Other Chemical and Allied Products Merchant Wholesalers
424690 Other Chemical and Allied Products Merchant Wholesalers

4247 Petroleum and Petroleum Products Merchant Wholesalers

42471 Petroleum Bulk Stations and Terminals
424710 Petroleum Bulk Stations and Terminals
42472 Petroleum and Petroleum Products Merchant Wholesalers (Except Bulk Stations and Terminals)
424720 Petroleum and Petroleum Products Merchant Wholesalers (Except Bulk Stations and Terminals)

4248 Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers

42481 Beer and Ale Merchant Wholesalers
424810 Beer and Ale Merchant Wholesalers
42482 Wine and Distilled Alcoholic Beverage Merchant Wholesalers
424820 Wine and Distilled Alcoholic Beverage Merchant Wholesalers

4249 Miscellaneous Nondurable Goods Merchant Wholesalers

42491 Farm Supplies Merchant Wholesalers
424910 Farm Supplies Merchant Wholesalers
42492 Book, Periodical, and Newspaper Merchant Wholesalers
424920 Book, Periodical, and Newspaper Merchant Wholesalers
42493 Flower, Nursery Stock, and Florists Supplies Merchant Wholesalers
424930 Flower, Nursery Stock, and Florists Supplies Merchant Wholesalers
42494 Tobacco and Tobacco Product Merchant Wholesalers
424940 Tobacco and Tobacco Product Merchant Wholesalers
42495 Paint, Varnish, and Supplies

Merchant Wholesalers

424950 Paint, Varnish, and Supplies Merchant Wholesalers
42499 Other Miscellaneous Nondurable Goods Merchant Wholesalers
424990 Other Miscellaneous Nondurable Goods Merchant Wholesalers

425 Wholesale Electronic Markets and Agents and Brokers

4251 Wholesale Electronic Markets and Agents and Brokers

42511 Business to Business Electronic Markets
425110 Business to Business Electronic Markets
42512 Wholesale Trade Agents and Brokers
425120 Wholesale Trade Agents and Brokers

44-45 Retail Trade

441 Motor Vehicle and Parts Dealers

4411 Automobile Dealers

44111 New Car Dealers
441110 New Car Dealers
44112 Used Car Dealers
441120 Used Car Dealers

4412 Other Motor Vehicle Dealers

- 44121 Recreational Vehicle Dealers
- 441210 Recreational Vehicle Dealers
- 44122 Motorcycle, Boat, and Other Motor Vehicle Dealers
- 441221 Motorcycle, ATV, and Personal Watercraft Dealers
- 441222 Boat Dealers
- 441229 All Other Motor Vehicle Dealers

4413 Automotive Parts, Accessories, and Tire Stores

- 44131 Automotive Parts and Accessories Stores
- 441310 Automotive Parts and Accessories Stores
- 44132 Tire Dealers
- 441320 Tire Dealers

442 Furniture and Home Furnishings Stores**4421 Furniture Stores**

- 44211 Furniture Stores
- 442110 Furniture Stores

4422 Home Furnishings Stores

- 44221 Floor Covering Stores
- 442210 Floor Covering Stores
- 44229 Other Home Furnishings Stores

- 442291 Window Treatment Stores

- 442299 All Other Home Furnishings Stores

443 Electronics and Appliance Stores**4431 Electronics and Appliance Stores**

- 44311 Appliance, Television, and Other Electronics Stores
- 443111 Household Appliance Stores
- 443112 Radio, Television, and Other Electronics Stores
- 44312 Computer and Software Stores
- 443120 Computer and Software Stores
- 44313 Camera and Photographic Supplies Stores
- 443130 Camera and Photographic Supplies Stores

444 Building Material and Garden Equipment and Supplies Dealers**4441 Building Material and Supplies Dealers**

- 44411 Home Centers
- 444110 Home Centers
- 44412 Paint and Wallpaper Stores
- 444120 Paint and Wallpaper Stores
- 44413 Hardware Stores
- 444130 Hardware Stores
- 44419 Other Building Material Dealers

- 444190 Other Building Material Dealers

4442 Lawn and Garden Equipment and Supplies Stores

- 44421 Outdoor Power Equipment Stores
- 444210 Outdoor Power Equipment Stores
- 44422 Nursery, Garden Center, and Farm Supply Stores
- 444220 Nursery, Garden Center, and Farm Supply Stores

445 Food and Beverage Stores**4451 Grocery Stores**

- 44511 Supermarkets and Other Grocery (Except Convenience) Stores
- 445110 Supermarkets and Other Grocery (Except Convenience) Stores
- 44512 Convenience Stores
- 445120 Convenience Stores

4452 Specialty Food Stores

- 44521 Meat Markets
- 445210 Meat Markets
- 44522 Fish and Seafood Markets
- 445220 Fish and Seafood Markets
- 44523 Fruit and Vegetable Markets
- 445230 Fruit and Vegetable Markets
- 44529 Other Specialty Food Stores

- 445291 Baked Goods Stores
- 445292 Confectionery and Nut Stores
- 445299 All Other Specialty Food Stores

4453 Beer, Wine, and Liquor Stores

- 44531 Beer, Wine, and Liquor Stores
- 445310 Beer, Wine, and Liquor Stores

446 Health and Personal Care Stores

4461 Health and Personal Care Stores

- 44611 Pharmacies and Drug Stores
- 446110 Pharmacies and Drug Stores
- 44612 Cosmetics, Beauty Supplies, and Perfume Stores
- 446120 Cosmetics, Beauty Supplies, and Perfume Stores
- 44613 Optical Goods Stores
- 446130 Optical Goods Stores
- 44619 Other Health and Personal Care Stores
- 446191 Food (Health) Supplement Stores
- 446199 All Other Health and Personal Care Stores

447 Gasoline Stations

4471 Gasoline Stations

- 44711 Gasoline Stations with Convenience Stores

- 447110 Gasoline Stations with Convenience Stores
- 44719 Other Gasoline Stations
- 447190 Other Gasoline Stations

448 Clothing and Clothing Accessories Stores

4481 Clothing Stores

- 44811 Mens' Clothing Stores
- 448110 Mens' Clothing Stores
- 44812 Womens' Clothing Stores
- 448120 Womens' Clothing Stores
- 44813 Children's and Infants' Clothing Stores
- 448130 Children's and Infants' Clothing Stores
- 44814 Family Clothing Stores
- 448140 Family Clothing Stores
- 44815 Clothing Accessories Stores
- 448150 Clothing Accessories Stores
- 44819 Other Clothing Stores
- 448190 Other Clothing Stores

4482 Shoe Stores

- 44821 Shoe Stores
- 448210 Shoe Stores

4483 Jewelry, Luggage, and Leather Goods Stores

- 44831 Jewelry Stores
- 448310 Jewelry Stores
- 44832 Luggage and Leather Goods Stores
- 448320 Luggage and Leather Goods Stores

451 Sporting Goods, Hobby, Book, and Music Stores

4511 Sporting Goods, Hobby, and Musical Instrument Stores

- 45111 Sporting Goods Stores
- 451110 Sporting Goods Stores
- 45112 Hobby, Toy, and Game Stores
- 451120 Hobby, Toy, and Game Stores
- 45113 Sewing, Needlework, and Piece Goods Stores
- 451130 Sewing, Needlework, and Piece Goods Stores
- 45114 Musical Instrument and Supplies Stores
- 451140 Musical Instrument and Supplies Stores

4512 Book, Periodical, and Music Stores

- 45121 Book Stores and News Dealers
- 451211 Book Stores
- 451212 News Dealers and Newsstands
- 45122 Prerecorded Tape, Compact Disc, and Record Stores

451220 Prerecorded Tape, Compact Disc, and Record Stores

452 General Merchandise Stores

4521 Department Stores

45211 Department Stores

452111 Department Stores (Except Discount Department Stores)

452112 Discount Department Stores

4529 Other General Merchandise Stores

45291 Warehouse Clubs and Supercenters

452910 Warehouse Clubs and Supercenters

45299 All Other General Merchandise Stores

452990 All Other General Merchandise Stores

453 Miscellaneous Store Retailers

4531 Florists

45311 Florists

453110 Florists

4532 Office Supplies, Stationery, and Gift Stores

45321 Office Supplies and Stationery Stores

453210 Office Supplies and Stationery Stores

45322 Gift, Novelty, and Souvenir Stores

453220 Gift, Novelty, and Souvenir Stores

4533 Used Merchandise Stores

45331 Used Merchandise Stores

453310 Used Merchandise Stores

4539 Other Miscellaneous Store Retailers

45391 Pet and Pet Supplies Stores

453910 Pet and Pet Supplies Stores

45392 Art Dealers

453920 Art Dealers

45393 Manufactured (Mobile) Home Dealers

453930 Manufactured (Mobile) Home Dealers

45399 All Other Miscellaneous Store Retailers

453991 Tobacco Stores

453998 All Other Miscellaneous Store Retailers (Except Tobacco Stores)

454 Nonstore Retailers

4541 Electronic Shopping and Mail-Order Houses

45411 Electronic Shopping and Mail-Order Houses

454111 Electronic Shopping

454112 Electronic Auctions

454113 Mail-Order Houses

4542 Vending Machine Operators

45421 Vending Machine Operators

454210 Vending Machine Operators

4543 Direct Selling Establishments

45431 Fuel Dealers

454311 Heating Oil Dealers

454312 Liquefied Petroleum Gas (Bottled Gas) Dealers

454319 Other Fuel Dealers

45439 Other Direct Selling Establishments

454390 Other Direct Selling Establishments

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